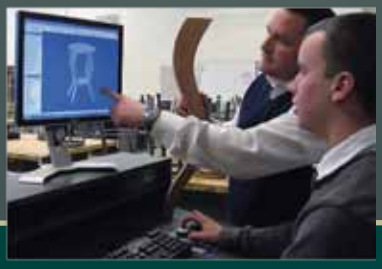
Report No. 82307-TR

Trading up to High Income

Turkey Country Economic Memorandum



May 05, 2014

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Turkey Country Economic Memorandum

Poverty Reduction and Economic Management Unit
Europe and Central Asia Region

May 5, 2014

Document of the World Bank

CURRENCY AND EQUIVALENT UNITS

Currency Equivalents

(Exchange Rate Effective April 30, 2014)
Currency Unit: Turkish Lira (TL)
US$1 = 2.1154 TL

Government Fiscal Year
January 1 - December 31

Weights and Measures
Metric System

ABBREVIATIONS AND ACRONYMS

ARIP	Agricultural Reform Implementation Project	MENA	Middle East and North Africa
BRICS	Brazil, Russia, India, China and South Africa	MFN	Most Favored Nation
CAGR	Compound Annual Growth Rate	MNC	Multinational Corporation
CEM	Country Economic Memorandum	NES	Not Elsewhere Specified
CMT	Cut, Make, Trim	NFRS	National Farmers' Registry System
COMTRADE	Commodity Trade Statistics Database	OECD	Organization for Economic Cooperation and Development
DEIK	Foreign Economic Relations Board	OJT	On-The-Job Training
EAP	East Asia and Pacific	OTRI	Overall Trade Restrictiveness Index
ECA	Europe and Central Asia	PET	Polyethylene Terephthalate
EFTA	European Free Trade Association	PISA	Program for International Student Assessment
ES	Enterprise Survey	PPP	Purchasing Power Parity
EU	European Union	PRODY	Sophistication of The Basket of Individual Products
EXIM	Export-Import	PSE	Producer Support Estimates
EXPY	Export Sophistication	PTA	Preferential Trade Agreements
FDI	Foreign Direct Investment	PVC	Polyvinyl Chloride
FTA	Free-Trade Agreement	R&D	Research and Development
GDP	Gross Domestic Product	RCA	Revealed Comparative Advantage
GNI	Gross National investment	ROO	Roles of Origin
GVC	Global Value Chains	RTR	Renault Technologie Roumanie
HS	Harmonized Commodity Description and Coding Systems	SME	Small and Medium Enterprises
ICA	Investment Climate Assessment	TCD	Trade Competitiveness Diagnostics
ICT	Information and Communication Technology	TFP	Total Factor Productivity
IEMP	International Ecosystem Management Partnership	TSD	Trade in Services Dataset
IMF	International Monetary Fund	TTB	Temporary Trade Barriers
IPARD	Instrument for Pre-Accession Assistance Program	TTRI	Trade Tariff Restrictiveness Index
ISKUR	Public Employment Agency	TurkStat	Turkish Statistics Agency
ISO	International Organization for Standardization	UNCTAD	United Nations Conference on Trade and Development
ITC	International Trade Commission	US	United States
ITKIB	Istanbul Textile and Apparel Exporter Associations	WDI	World Development Indicators
JCI	Joint Commission International	WITS	World Integrated Trade Solution
LPI	Logistics Performance Index	WTI	World Trade Indicators
M&S	Marks & Spencer	WTO	World Trade Organization
MEG	Mono Ethylene Glycol	YASED	International Investors Association

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF BOXES

ACKNOWLEDGEMENTS

This report was prepared by a team led by Kamer Karakurum-Özdemir and consisting of Jose Guilherme Reis, Daria Taglioni, Thomas Farole, Chad Bown, Tolga Cebeci, Jose Daniel Reyes, Daniel Lederman, Donald Larson, Seda Köymen and Diego Rojas. Mona Haddad, Milan Nedeljkovic, Cevdet Çağdaş Ünal, Guillermo Carlos Arenas, Can Erbil and Ümit Özlale made important contributions to the report. Kamil Yilmaz, Jean-Pierre Chauffour, Paul Brenton and Marina Wes provided comments on earlier drafts. Overall guidance was provided by Martin Raiser, Roumeen Islam, Ivailo Izvorski and Yvonne Tsikata. Pinar Baydar and Ayberk Yilmaz prepared the report for publication.

The preparation of the report was closely coordinated with the Directorate General of Exports in the Ministry of Economy. The report presents the key findings of the background papers drafted by the team and provides policy areas for addressing the identified challenges. The discussions of the background work with various public agencies in a number of workshops and written comments on the earlier drafts provided valuable feedback. TOBB facilitated focus group discussions with four manufacturing sectors, which informed and complemented the quantitative analysis in the report and DEIK facilitated a focus group discussion on health tourism as an input to the work on services exports.

Orhan Iktu designed the cover page.

Executive Summary

Strong export growth combined with increased diversification

1. Turkey's export performance since 2002 has been strong. Amid a conducive global environment, progress in advancing structural reforms domestically, and with more productive companies, merchandise exports increased from US$36 billion in 2002 to over US$150 billion in 2012. Exports grew 15 percent a year on average in dollar terms, more than six percentage points above the average global growth of exports, and as much as the pace of expansion in Brazil, Russia, and India.

2. Turkey diversified both its export markets and its export product mix.

- *Markets*. Turkish exporters substantially broadened their market reach, exporting to 137 countries at present, up from 90 in 2000[1]. Since the global financial crisis, amid a sluggish expansion in demand in traditional markets, the share of Turkey's exports to the European Union (EU) and the European Free Trade Association (EFTA) declined, while that of Middle East and North Africa (MENA) and other markets rose. These changes notwithstanding, the EU remains Turkey's key trading and investment partner. It is companies that exported to the EU that led the expansion of exports to MENA, drawing on their experience in serving a demanding client. Moreover, the spillovers from the strong trade and investment relationship with the EU – including of technology, management and marketing expertise – are essential for generating solid value added and helping upgrade Turkey's export basket.
- *Products*. The composition of Turkey's export basket changed significantly over the past decade, as the economy is moving increasingly to capital-intensive and institutions intensive products from those intensive predominantly in inexpensive labor. Turkey entered the decade highly reliant on apparel exports. Over time, the importance of apparel declined dramatically and was overtaken around the middle of the decade by the automotive sector. More recently, products of the metals, machinery, and, to a lesser extent, agri-food industries have taken a prominent position in the export basket. Exports of chemicals, particularly plastics, have also been rising in the last few years.

Turkey's export competitiveness has improved

3. Much like its economy, Turkey's exports have become more globally competitive. Turkey's global market share rose substantially from 0.55 percent of global imports in 2002 to 0.82 percent in 2012. Increased competitiveness of firms supported by measures to streamline the business environment, improve infrastructure, connect the country domestically and internationally, has been a key feature of the last decade. Export competitiveness is "the degree to which, under open market conditions, a country can produce goods and services that meet the test of foreign competition while simultaneously maintaining and expanding domestic real income."[2] Measures of export competitiveness include firms' market share, the level of complexity or technology content of exported products, and the ability of firms to charge higher prices for similar products due to higher quality perception.

4. Export sophistication, an important measure of export competitiveness, improved through 2007. Turkey's export sophistication increased almost 20 percent between 1997 and 2007, eased until 2009, and picked up again since then.[3] The increasing importance of mid-tech exports (mainly automobiles and auto parts) played an important role in the evolution of Turkey's export sophistication as they replaced less sophisticated

1 Includes destinations with exports of more than US$10 million.

2 This is a standard definition of export competitiveness popularized by OECD.

3 See Hausmann, Hwand and Rodrik (2007). The sophistication of a country's export basket – denoted as 'EXPY' – derives from the sophistication of the basket of individual products (denoted as 'PRODY') it exports. If a product, say, an internal combustion engine is largely produced by rich countries, that product would be revealed to be 'rich' and sophisticated.

products (garments and textiles) as the top export sectors and allowed the country to narrow the "sophistication gap" with countries such as Poland and Mexico until 2007. The decline in export sophistication after 2007 can at least partially be attributed to the commodity price boom of 2008, but was also impacted strongly by the decline in automotive and other mid-tech exports to the EU.

5. The quality of exports also improved. In 2002, the absolute majority of exports (64 percent) was concentrated in products which were sold at a unit price in the bottom third of the price distribution compared to the price of all competitors selling to the same destination market. By 2010 the majority of products were sold at the middle or high end of the quality range. Export quality has improved remarkably in particular in those sectors where quality standards matter most, such as machinery. Exporters with higher quality of exports are more likely to survive in export markets.

Turkey wants to further strengthen export performance

6. The authorities' ambitious development vision for 2023 includes a prominent role for its exports. Turkey aims to become one of the ten largest economies in the world by 2023, with per-capita Gross Domestic Product (GDP) rising to US$25,000 and exports to US$500 billion. Turkey has a success story to build on, as evidenced by its impressive reforms since 2001 and its quick rebound from the global crisis. Size, geographic location, excellent connectivity to East and West, and a young labor force are also key factors that will contribute to success. Still, all key structural features of Turkey's economy will need to be fit for premiere league standards if the country is to succeed. This report focuses on Turkey's competitiveness from the supply side, but it is important to note that ensuring a more balanced mix of financing for the required investment through measures to boost domestic savings is equally important if Turkey's progress is to be sustained.[4]

7. Achieving Turkey's export target is possible and it will likely require a larger global market share. With the recent slowdown of growth in both in advanced and emerging economies, Turkey may not benefit as much from the 'pull' of growing global demand as it did over the past decade. Thus, achieving continued rapid export growth and reaching the government's export targets will require a significant increase in Turkey's global market share. This, in turn, means that exporters need to become more competitive by producing goods at more attractive prices – or at higher quality, expanding their product range to faster growing product segments, and improving quality and technological sophistication to command higher prices in export markets. Accordingly, this establishes the critical importance of competitiveness for the Turkish export sector and sets out an agenda that is based on continued substantial increases in productivity driven by innovation and focused on quality.

There are plenty of challenges

8. Despite high export growth, exports have not been the main driving force of rising incomes in Turkey over the last decade. The ratio of exports to GDP rose from 20 percent in 1998-2000 on average to about 23 percent by 2009-2011. This increase is smaller than in most relevant comparators at a similar level of development except Russia. Exports to GDP increased by about 10 percentage points in the EU12[5] over the same period, 11 percentage points in India, and 9 percentage points in China.

9. Turkey has specialized in mid-tech sectors which have experienced relatively slow growth in global demand. Although Turkey's exports are one of the most diversified among middle-income countries, they are dominated by goods and sectors that have experienced only modest growth in global terms. In addition, while Turkey has dramatically increased its medium-technology exports, it stagnated in high-tech exports. Indeed, relative to peers, Turkey's product composition has exerted a strong downward bias on export growth. In other words, Turkey lacks a comparative advantage in higher growth products. Since these products are relatively distant to the country's current export basket there are few low cost opportunities for Turkey to shift to a more dynamic export composition. Changes in the export basket will require investments and the upgrading to Turkey's skill base, as explained further below.

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4 This challenge was addressed in a joint World Bank-Ministry of Development (2012) Turkey Country Economic Memorandum "Sustaining High Growth: The Role of Domestic Savings". http://documents.worldbank.org/curated/en/2011/12/17011874/turkey-country-economic-memorandum-cem-sustaining-high-growth-role-domestic-savings-synthesis-report.

5 Countries that joined the EU in 2004 and 2007.

10. However, there is strong potential for Turkey to move up the global value chains (GVC). Turkish companies in key sectors of the economy have successfully integrated into GVC and Turkey's presence in GVC is stronger than in comparators such as Mexico and Brazil. Although Turkey seems to specialize in assembly and low value added segments of GVC, the country's presence is strongest in sectors with longer than average value chains, representing an important opportunity for upgrading along the chain. Furthermore, Turkey meets an important pre-condition for effectively attracting value-chain related activity. Namely, its trade costs are low and its logistics infrastructure is well developed, particularly when the country is benchmarked against competitors with similar income levels.

11. The relatively low level of Foreign Direct Investment (FDI) in Turkish manufacturing has been a constraint to export growth and quality improvements. Limited inflows of FDI will hamper Turkey's ability to benefit from the technology and knowledge spillovers from firms likely to be close to the technology frontier and thus move up the value chain. A conducive business environment is an important determinant of FDI, and Doing Business indicators suggest Turkey (ranked 69th) does not compare favorably with many of its competitors. A recent survey of foreign investors suggests the main barriers to larger inflows of FDI in Turkey are microeconomic: tax and incentive policies, lack of legal assurance, and the unregistered economy are the top three factors.[6] Innovative capacity and adequate work skills are also factors that will play a key role in attracting foreign investors.

12. The relatively poor export performance of Turkey's SMEs is one of the main constraints to the growth and upgrading of exports. Turkey's firm distribution reveals a surprising lack of dynamism among Turkey's mid-sized firms, in terms of exports as well as productivity growth – a phenomenon this Report calls the "Missing Middle".[7] Export growth has been driven strongly by the large (and growing) firms that operate at a substantial productivity premium over the majority of exporters and domestic producers alike. These large firms are driving both intensive and extensive margin growth and are increasingly pulling away from the rest of the economy. At the same time Turkey's export growth is driven almost exclusively by the intensive margin, as new entries (firms, products, and markets) have not delivered sufficient growth to offset corresponding losses of old firms, products, and markets. On the one hand, this indicates that Turkey's established exporters are becoming increasingly competitive. On the other hand, it also means that there may be a problem of access to exporting and export survival for smaller firms. Helping small firms to become dynamic, sustainable mid-sized exporters may be important, as improved performance at each of the extensive margins is likely to be critical to Turkey's future growth. In addition, as human capital intensive services become increasingly important for growth, a dynamic SME sector is likely to become even more important, as evidence from advanced economies suggests.

13. The performance of the services sector has lagged behind competitors. Turkey's services exports have been sluggish during the last decade, in particular with respect to commercial services excluding travel and transport services. Exporting competitive products depends not only on access to raw material inputs but also on critical services inputs. These include efficient, competitively priced utilities, cost efficient financial services, and other commercial services. While manufacturing accounts for 72 percent of the gross value added in 2007, its share falls considerably when forward and backward linkages to the service sector are considered.[8] This highlights the embedded value of services inputs to manufacturing exports and underlines the importance of a competitive services industry. Commercial services, transport and distribution services are particularly important. Turkey's services sector is subject to a wide range of regulatory restrictions, including on entry and price-setting, that hamper competition. A significant decrease in relative regulatory restrictiveness in services is likely to yield substantial gains in value added in service-intensive industries. Integration with the EU in the area of services would also pay off in terms of raising the sector's competitiveness.

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6 YASED.

7 The qualifier "middle" refers to the group of firms with 20-50 employees, i.e. a subset of the wider category of mid-sized firms used in the report (with 20 to 200 employees).

8 This includes the direct contribution of services to Turkish exports measured in terms of the value added content, as well as the indirect shares. Indirect shares are measured through (i) value added within a sector that is embodied, through forward linkages, in final exports in other sectors and (ii) backward linkages, where value added from upstream sectors that is embodied, through intermediate linkages, in final exports within a particular sector

14. While Turkey has substantially liberalized its trade regime, its use of trade policy flexibilities may negatively affect trade flows and resource allocation. In line with the large scale and frequent use of trade policy flexibilities by many countries, Turkey is also exercising flexibility through temporary trade barriers (TTBs) such as antidumping, safeguards and countervailing duties. The list of major import products that are subject to TTBs (including textiles and apparel, metals and electrical machinery) presents some cause for concern regarding Turkey's industrial competitiveness, since most of these are applied to key industrial inputs. New import restrictions on inputs impose higher costs on domestic downstream industries in Turkey and work to decrease the competitiveness of these industries. Moreover, difficulty in accessing quality inputs may also have a potential impact on the quality of exports, as suggested by the analysis of the determinants of export quality. Finally, if the industries further down the value chain are also protected by new import restrictions, competitiveness suffers through "cascading contingent protection". This potential negative impact on competitiveness is largely mitigated by the inward processing regime under which key inputs imported for production of exported goods are exempt from trade remedies. In 2013, 44 percent of exports fell under this regime.[9]

An effective policy agenda for competitiveness needs to focus on productivity

15. Raising export growth to levels that help meet Turkey's development goals will require a policy agenda that targets sustained further improvements in Turkey's physical, human, and institutional capital. This "asset" foundation of the economy ultimately drives economic development. Boosting the quality, cost competitiveness and range of exports is mainly the result of constant upgrades to the country's assets. Recent cross-country quantitative assessments of the main determinants of export diversification show that market access, infrastructure, human capital, and the quality of institutions positively and significantly affect the level of export diversification most of which are also relevant for the competitiveness discussion presented in this report.

16. Upgrading the existing export basket is unlikely to benefit measurably from policies that 'pick winners' among products and sectors. Instead, addressing the factors that limit productivity growth will be key to success. Consequently, this report prioritizes broader policies that are fundamental for Turkey to export its way out of middle-income. Chief among these are policies that: (i) link the country further with international markets, including by helping bring larger inflows of FDI, particularly into the manufacturing sector; (ii) promote innovation, including by encouraging a large role for private companies in research and development (R&D); (iii) upgrade the skills both of the existing work force and new entrants; and (iv) improve access to finance, particularly long-term, with a view to unlock the potential of the dynamic SME sector. While these policy areas are the ones most directly relevant for enhancing productivity and upgrading export quality, there are other reforms, particularly in the context of improvements to investment climate that would also contribute to upgrading the export basket.

17. Technology upgrading, innovation, and experimentation by large and medium-sized firms hold the key to upgrading exports. Nominal export growth is important, but ultimately it is value added growth that matters. Analysis indicates that technology upgrading and absorption is an important determinant of value added growth and that primary channels for these are FDI, import of intermediates and investment in R&D. Among other benefits, technology upgrading and absorption allow for the production of more sophisticated and higher quality goods, which generate higher value added. Medium and especially large firms have driven product diversification and quality in recent years, and will continue to be in the best position to invest in research and in innovation more broadly. This will encompass investment in R&D to improve capacity for innovation and technology absorption. Moreover, there exists significant potential for spillovers of technology adoption to SMEs as well as reputation effects from investments in quality and branding for Turkey's leading companies. At the same time, it is apparent that Turkey has far from exhausted its potential to attract FDI, despite the significant increase in inflows over the past decade. A coordinated strategy to make Turkey more attractive as an investment destination for multinational companies as well as for innovation by domestic industry leaders would go a long way towards delivering the upgrading of Turkey's technological capabilities to premier league level.

9 Comments from the Ministry of Economy on the draft version of this report.

18. Higher value added exports will require more skilled labor, particularly as the global digitalization leads to a decline in the relevance of labor-cost advantage. Firms with a higher share of staff with university education and relevant skills tend to show higher productivity, according to the analysis carried out in the Turkey 2010 Investment Climate Assessment (ICA). Survey results show that larger firms are in a better position to afford skilled staff with university education, which contributes to larger firms' better export performance compared to mid-sized firms. A more educated workforce, essential to adopting new technology, is also likely to attract higher foreign investment into the country, as suggested by the analysis of the global value chains. As a result, upgrading the skills set of the workforce is an important element of moving up the value added ladder in exports. Nearly a quarter of Turkish firms rate the education and skills levels of the workforce as a major or very severe constraint on operations and growth. The low level of skills of the working age population (particularly for women), the increasing demand for skills, and the demographic dividend make skills particularly relevant in Turkey. Improving the quality of education through the school cycle is the most cost-effective measure to enhance productive employment over the long run. In addition, enhancing the skills of the existing labor force is also crucial.

19. Firms of all size categories perceive access to finance as the single most severe obstacle to expanding business. Medium-sized firms appear to be particularly affected, with a third of these firms citing lack of finance as a constraint. Medium- and long-term financing is particularly scarce and high collateral requirements or credit rejection rates prevent many SMEs from realizing investments to upgrade or expand their facilities. The access of SMEs to long-term finance can be improved through consistently stability-oriented macroeconomic policy and reforms of the institutional environment for credit markets, including insolvency legislation and a more efficient framework for secured transactions. The ability of financial institutions to assess the creditworthiness of SMEs can be supported through improved credit information, enforcement of transparent financial reporting standards and technical assistance to improve the ability of SMEs to present investment and business plans. Leasing products and private equity are also potential instruments which could better serve SMEs' financing needs.

20. The following table provides more specific policy recommendations, some of which rely on other World Bank studies.

Table 1: Policy options to promote exports

Policy Area	Recommendations
	Fundamentals[10]
Innovation and R&D	➢ Boosting university-private sector collaboration on innovation and technology acquisition and absorption as well enabling technology diffusion within sectors ➢ Increasing the commercialization of R&D by increasing the capacity of technology transfer offices and by improving the regulatory framework to provide the correct incentives (e.g. Patent law) ➢ Improving transfer mechanism of the publicly funded research to private sector ➢ Ensuring the consistency of existing incentive schemes and support mechanisms to increase return on R&D expenditure
Skills and education	➢ Ensuring curriculum for primary and secondary education encompass the full skills set (from increasingly higher-level cognitive skills to technical and innovation skills) ➢ Strengthening the quality assurance systems ➢ Improving teaching methods, school financing and service delivery ➢ Improving the quality of the rapidly expanding higher education ➢ Upgrading skills of the existing workers, through on-the job training and jobseekers, through vocational training (in line with the demand for skills)
Access to finance for SMEs	➢ Improving the institutional framework for SME financing, including credit markets, and enhancing the insolvency and secured transactions systems ➢ Developing non-bank financial sector including leasing, factoring, microfinance, capital and equity markets and private equity ➢ Improving transparency of SMEs to help financial institutions assess their creditworthiness.
Business climate	➢ Facilitate work permits for international personnel critical to operation of large multinational corporations (MNCs) ➢ Improve and streamline licensing and permit systems (including land allocation mechanism) ➢ Improve enforcement of IPR protection ➢ Liberalize professional services (in particular legal services) ➢ Strengthen the independence of all regulatory agencies
	Trade-specific policies
Trade Policy	➢ Using temporary trade barriers and import restrictions selectively with a view to safeguard competitiveness
Export promotion	➢ Developing a database of export promotion policies for introducing impact assessments of existing and future policies
Services sector	➢ Increasing services sector liberalization ➢ Deepen integration with the EU through expanding the coverage of the Customs Union or through a complementary free trade agreement (FTA) in agriculture and services.

10 Based on earlier World Bank studies including: Investment Climate Assessment (2010), Improving Conditions for SME Growth, Finance and Innovation (2011), Promoting Excellence in Turkey's Schools (2013).

1. Motivation and Context

1. Turkey has set itself the goal of breaking into high income status and becoming one of the top ten economies in the world by 2023, the year that will mark the centenary of the foundation of the Republic. Achieving this goal will see Turkey's per-capita GDP rise to US$25,000, more than twice its current levels. Turkey will in the process regain the global heft it held until the early 16th century and solidify its role on the crossroads between East and West.

2. Turkey's impressive track record of economic and structural transformation provides the foundation for the country's ambitions. After a banking crisis in 2001, the country embarked on a concerted path of structural reforms supported by strong fiscal consolidation, strengthened banking supervision, an overhaul of the social security system, and a shift to a flexible exchange rate regime with an independent central bank. Inflation declined to single-digits, public debt fell to below 40 percent of GDP, and growth picked up. Large capital inflows followed, helping finance growth despite a declining domestic saving rate. However, with external financing increasingly short-term, the economy has become vulnerable to a potential slow-down or reversals in capital inflows. Boosting export competitiveness, alongside increasing the saving rate, has emerged as a priority for sustaining the gains of the past decade.

3. Turkey's export engine needs to be revved up if the 2023 goals are to be reached. Turkey's merchandise exports increased from US$36 billion in 2002 to more than US$150 billion in 2012, an increase of 15 percent a year on average in dollar terms, more than six percentage points above the average global growth of exports, and as much as the pace of expansion in Brazil, Russia, and India. Two-thirds of this robust export performance was accounted for by existing firms exporting existing products to existing export markets (i.e. by expansion on "the intensive margin"). Most of the remainder was due to a mix of new products and new markets, themselves reflecting the substantial boost to Turkey's human, physical and institutional capital. Looking ahead, a sustained and improved export performance will be driven more by exporting new and better products and exporting to new and fast-growing destinations (i.e. by expansion on "the extensive margin").

4. The past decade confirms that Turkey has what it takes to increase export competitiveness. Turkish exports acquired an increasingly bigger share of the global import demand, up from 0.55 percent in 2002-03 to 0.82 percent in 2011-12, comparable to the increase observed in Indonesia, South Africa and Czech Republic. During this period, the shift in the product composition led to an increased level of sophistication—exporting products that are mostly produced by high income countries, and an increase in the exports of mid-tech products. Increased sophistication was also accompanied by higher export quality.

5. Increasing further Turkey's share of global exports will be more challenging as the expansion in global trade slows. A slow crisis recovery in Europe and continued concerns over global macroeconomic imbalances have kept trade growth subdued since the 2008-09 crisis, and there are concerns that this trend may persist even as the advanced economies return to trend growth. Turkey will thus benefit less from the 'pull' of growing global demand than it did over the past decade. Achieving continued rapid export growth and reaching the government's export targets will require an additional push to boost significantly Turkey's global market share.[11]

6. Expanding Turkey's global market share relies most importantly on a policy agenda that is centered on upgrading Turkey's physical, human and institutional capital. Turkey has done well in maintaining the competitiveness of its existing export basket and diversifying into new export markets. The country has done less well in moving up the value-added and quality ladder, by producing new and better products. Going forward, Turkish exporters will need to become more competitive by expanding their product range to focus on goods and services experiencing above average growth in global demand, and improving

11 While the depreciation of the Turkish Lira may give a boost to exports in the short-term, it is unlikely to be a determinant of export performance in the medium-to-long term. Furthermore, the significant import content of exports also reduces any such favorable impact of a weaker currency even in the short term. This report focuses on the micro and structural determinants of export competitiveness.

quality and technological sophistication in order to command higher prices in export markets. The related policy agenda covers measures to increase productivity, boost innovation, and raise quality. More broadly, the benefits Turkey can hope to draw from a reallocation of resources from agriculture to industry and services may slowly diminish. Sustained growth will require increased investments in Turkey's physical, human, and institutional capital. Just as the competitiveness of a company is ultimately the result of the quality of its assets, national economies also need to continuously upgrade their asset foundations to move further ahead. This is the basis for sustained gains in export competitiveness as well, and arguably more important than targeted sector-specific policies. The policy recommendations of this report reflect the priority of "horizontal" measures to upgrade Turkey's physical, human and institutional capital.

7. Export competitiveness is only one side of the challenge of ensuring sustained progress towards high income in Turkey. The other side is the need to increase domestic savings to finance the necessary investments while the current account deficit improves. The World Bank and the Ministry of Development issued a joint report in 2012 on the role of domestic savings in Turkey's growth, including policies for enhancing household and firm savings.[12] The present report complements the analysis in the earlier release.

Structure of the Report

8. The rest of this report brings together the main findings and policy implications from a diverse set of background papers. The core of the background work is based on the Trade Competitiveness Diagnostics (TCD) developed by the International Trade Department of the World Bank.

9. This report utilizes the TCD framework developed at the World Bank in analyzing trade competitiveness (see Annex 3 for a full description of the framework). The TCD is a simple guide that facilitates a systematic assessment of a country's position, performance, and capabilities in export markets. It is designed to allow for an analysis at the national level (looking at the export basket and the cross-cutting environment for export competitiveness) but also at the sector level, including services sectors. It therefore enables countries to identify which aspects of competitiveness matter most for specific sectors and which factors have the biggest impact on competitiveness. The TCD has two parts: (i) an analysis of trade performance and (ii) a diagnostics of binding constraints. The core of the analysis of trade performance provides a quantitative and qualitative study of historical trade performance using the decomposition of the margins of trade growth as the framework for exploring trade competitiveness. Specifically there are four principal factors on which a country's trade competitiveness performance can be determined: (i) the *intensive margin*, with a focus on the *level and growth* of exports as well as *market share* performance; (ii) the extensive margin, including *diversification* of both products and markets; (iii) the *quality margin*, focusing on the *quality or sophistication* of exports; and (iv) the *sustainability* margin, including the *participation and survival* of firms in export markets. This chapter discusses where Turkey stands on these margins.

10. Chapter 2 provides analyses the profile and trends in Turkey's exports, with a focus on markets, products, and firms. Chapter 3 presents the core of the analysis and provides a thorough discussion of "micro" determinants of export competitiveness organized around diversification of markets and products and upgrading export quality. Chapter 4 discusses the role of Turkey's integration into international value chains with a focus on three selected sectors: agrifood, automotive, and textiles and apparel. While the focus of this report is primarily on goods exports, Chapter 5 introduces a brief assessment of trade in services, particularly as a key ingredient to a competitive goods sector. Throughout the report, the firm-level analysis is built into the discussion of the various structural features of exports. Finally, Chapter 6 examines the policy implications of the analysis presented, with a focus on trade policy, export promotion and most critically, on horizontal policies for competitiveness.

12 Turkey Country Economic Memorandum "The Role of Domestic Savings" (2012).

2. Exports, Exporters and Partners

INTRODUCTION

11. Turkey's export performance over the last decade has been strong. During this period, Turkish exports gained an increasingly bigger share of the global import demand, up from 0.55 percent in 2002 to 0.83 percent in 2012. Market diversification towards non-traditional markets, particularly at a time when the EU suffered from weak demand, paid off. At the same time, the shift in the product composition led to an increased level of sophistication. Moreover, the quality of Turkish exports also improved. The country developed revealed comparative advantage in new products such as road vehicles and on the whole demonstrated a larger degree of export diversification than many of its Brazil, Russia, India, China and South Africa (BRICS) peers.

12. What countries produce and how they produce it matters for export growth. Simply put, to ascend to high income status, Turkey needs to shift into producing and trading more high income goods and services, and perhaps even more importantly, move up the value chain in those sectors in which it is already specialized. Over the past decade, while Turkey dramatically increased its medium-technology exports, the increase in its high-tech exports was not as strong. Furthermore, the quality ranking of Turkish exports remained low – especially in EU markets – despite significant improvements of late.

13. Turkey's good export performance has not been shared widely across the spectrum of firms. While the number of mid-sized firms increased during 2003-08, their contribution to exports decreased significantly. The analysis suggests the underlying cause is the low and declining productivity for this group of firms. This weak performance is likely to be a result of significant barriers, such as a taxing regulatory environment, which disproportionately affect mid-sized firms. Spreading export success more widely will be key to boosting export growth on the extensive margin going forward.

14. This chapter starts with a snapshot of Turkey's exports and exporters with a focus on three dimensions; markets, sectors (products) and firms. The chapter introduces the concepts of trade margin, export sophistication and export quality before proceeding to assess Turkey's export competitiveness as measured by these indicators. Agriculture trade is then discussed in more detail. The chapter ends with introducing the problem of "the missing middle" – i.e., the underperformance of mid-sized firms according to their contribution to exports, driven by low and declining productivity.

OVERVIEW OF EXPORTS

15. Exports grew rapidly after 2001, with a temporary decline in 2009. Exports grew at a double digit rate every year until the global financial crisis in 2009. Following a decline of one-fifth in 2009, exports recovered in 2010 and accelerated in 2011-12, moving well beyond the 2008 peak and passing the US$150 billion mark (Figure 1 and Figure 2). Overall, exports grew by a factor of four, or 15.3 percent annually, during the 2000s. To put this into perspective, Turkey's export expansion during the past decade was more than 6 percentage points above the global annual average growth of exports, more than twice that of Organization for Economic Cooperation and Development (OECD) countries, and only 4 percentage points below that of China.

Figure 1: Total exports, 1995-2012

(In millions of US$)

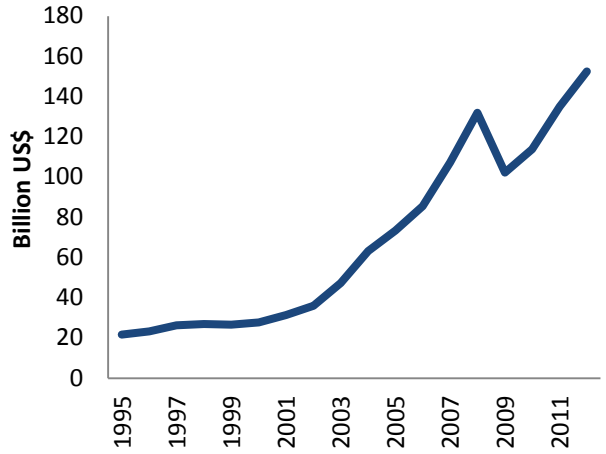
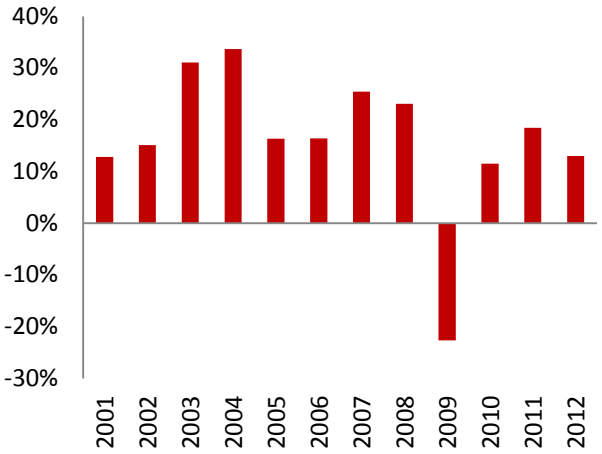


Figure 2: Annual export growth rate, 2001-2012

(In percent)

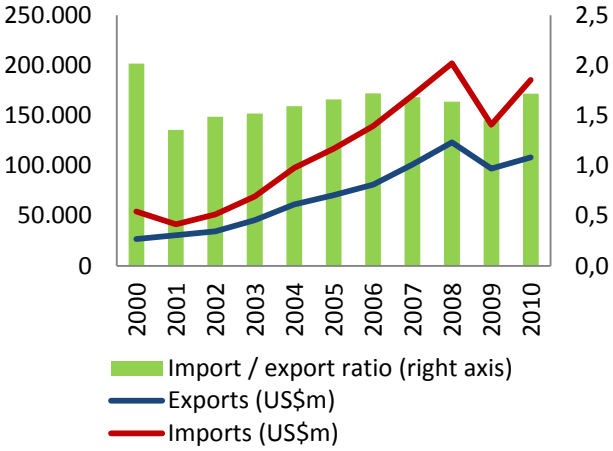


Source: Central Bank.

16. The sharp export expansion notwithstanding, Turkey's trade rose only modestly relative to GDP during the last decade. Imports grew significantly, with the trade deficit widening over the decade (Figure 3). But while Turkey did increase imports 50 percent faster than the world average and 75 percent faster than the OECD average, this increase was far less than in other emerging market economies which experienced a dramatic expansion of their integration into global production networks. For example, Turkey's rate of import growth was only half the rate observed in China over the decade. At the same time, Turkey's GDP measured in US dollar terms tripled over the past decade as the real exchange rate appreciated. Consequently, the ratio of trade to GDP increased by only 5 percentage points from 1998-2000 to 2008-2010, the smallest change among all comparators with the exception of Russia. Overall, Turkey's trade volume-to-GDP ratio is broadly in line with its BRICS comparators, but far below that of smaller neighbors at similar levels of development (Figure 4).

Figure 3: Export and import growth, 2001-2010

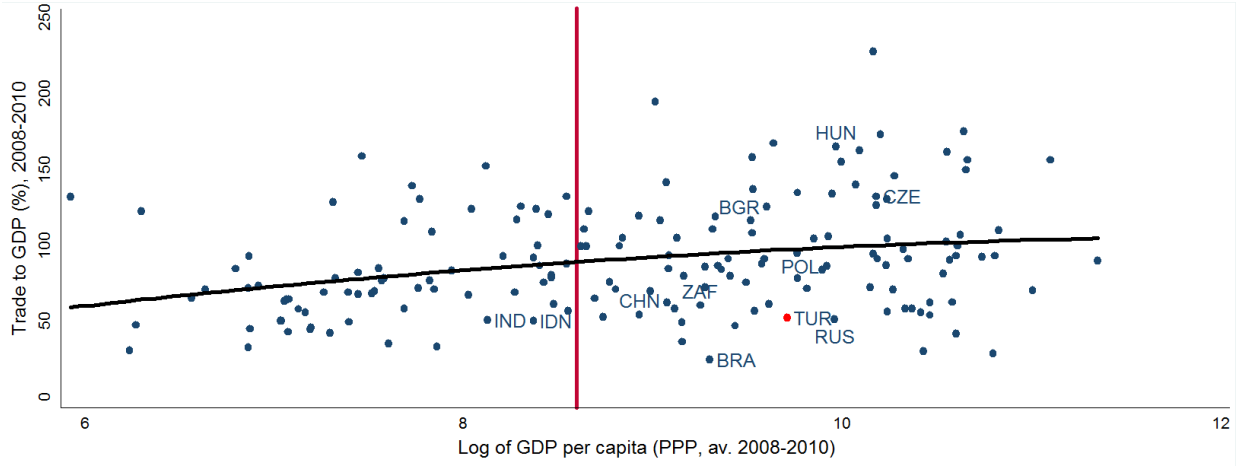
(In millions of US$)



Source: World Development Indicators (WDI).

17. An increase in a country's exports can be due to rising global demand or to improvements in competitiveness. For policy purposes, it is useful to decompose these two factors. Assuming that Country A is 'more competitive' in trade than Country B simply because its exports are growing faster is simplistic. Even using relative performance in terms of market share, growth may be prone to misinterpretation. This is because export growth is influenced by "pull" (or compositional) effects and "push" (or performance) effects (Table 2). Two countries may actually have similarly competitive bundles of export firms, but overall export performance of one country will be higher than the other in the short-to-medium term because it has a more favorable (at the time) composition of exports, in terms of both geographical markets and sectors. What does decomposing exports in this way say about Turkey's export competitiveness in recent years?

Figure 4: Trade-to-GDP ratio, 2008-2010
(In percent)



Source: WDI.

18. Competitiveness played a bigger role in driving exports before the crisis, but pull factors became more dominant after 2009. The analysis provides three key findings. First, until the crisis Turkey clearly outperformed global export growth, but during and after the crisis (2010) growth fell below the average. Second, until the crisis, competitiveness (or "push" effects) played the biggest role in driving export growth before giving way to "pull" factors during and after the crisis. Third, going forward, Turkey's greatest challenge in increasing export growth may be due less to the geographical composition of its exports and more to the sectoral composition. In other words, Turkey needs to move into products for which global demand is growing fast.

Table 2: Decomposition of export growth into 'pull' and 'push' factors: Turkey versus peers, 2005-10[13]
(In percent)

	Export Growth	Export market share change	Performance (export growth without composition effects)	Pull factors (specialization, composition effects), of which:		Push factors ("performance", i.e. export market share growth without composition effects), of which:		
				Geographical	Sectoral	Overall (Value)	Price component	Volumes component
Turkey	11.8	2.4	13.1	1.0	-2.4	3.6	0.6	3.0
Brazil	14.9	5.6	11.7	2.1	1.1	1.8	2.6	-0.8
Russia	12.4	3.0	8.4	0.9	3.1	-1.2	0.6	-1.8
India	14.9	5.5	14.4	0.4	0.0	4.6	-1.7	6.4
China	17.3	7.9	20.1	-0.2	-2.6	10.3	1.4	8.8
South Africa	12.1	2.7	10.6	0.9	0.6	1.0	0.1	0.8
Germany	6.1	-3.2	6.8	-0.5	-0.2	-2.3	-1.3	-1.1
USA	7.4	-1.9	5.6	1.6	0.3	-3.6	-0.4	-3.2

Source: World Bank staff calculations based on data from Turkish Statistics Agency (TurkStat)
Note: Figures are for the average annual growth in exports from 2005q5 to 2010q4.

13 The method consists of three main steps, as described in Gaulier, Taglioni and Zignago (2012). First, it computes the so-called "mid-point growth rates" of exports (Davis and Haltiwanger 1992). The advantage of using these growth rates is that, unlike more traditional measures of export growth, they account for the extensive margin of trade, even at the finest level of disaggregation. Second, starting from a data set disaggregated by destination and sector (or product), the export growth is decomposed into a sector effect, a geographical effect, and a pure competitiveness effect. Specifically, it regresses the mid-point growth rate on three sets of fixed effects, that is, exporter, importer, and sector/product fixed effects—here denoted with the letter f by means of a weighted OLS estimation. Third, it computes the indices from estimated coefficients, after normalizing the coefficients and standard errors (see Gaulier, Taglioni and Zignago (2012)).

19. Turkey's trade competitiveness compares favorably to that of its major peers. Table 2 shows that Turkey's export performance stripped of compositional effects during the period 2005-2010 is relatively strong, trailing only China and India among the peer group. The negative effect of Turkey's sectoral composition is clear, while the geographical contribution to growth is higher than in any peer country other than Brazil. This seems to run counter to the conventional wisdom that Turkey has a market problem that must be addressed, for example by shifting away from the EU. Instead, it suggests that the problem is more one of the sectors in which Turkey's exporters compete, and their position within these sectors. Looking at the 'push' or performance factors, it is clear that Turkey has grown well on the back of volume growth, while price has played a relatively minor role.

20. However, Turkey's export gains were mostly the result of existing firms selling more of the same products. A de-composition of export growth on the intensive and extensive margins provides an important indicator of a country's competitiveness. Specifically, one can look at whether export growth is the result of existing companies exporting more of their current products to existing markets (the "intensive margin"), or whether exports increase because new firms enter, new products are exported and new markets opened (three dimensions of the "extensive margin") (Table 3). Such a de-composition reveals that the "intensive margin" accounted for nearly two-thirds of export growth in 2002-2011 (Figure 5). By contrast, new markets accounted for 15 percent, new products for 9 percent, and new firms for 11 percent. This is in line with the analyses in Aldan and Çulha (2013), which suggest the increase in the extensive margin of exports during 1993-2011 mostly comes from entering new markets.

Table 3: Trade margins

Intensive Margin of trade	Exports of the same products by the same firms to the same markets may increase.
Extensive Margin of trade[14]	Existing exporters may introduce new products
	Existing exporters may enter new markets
	There may be firms entering export markets for the first time

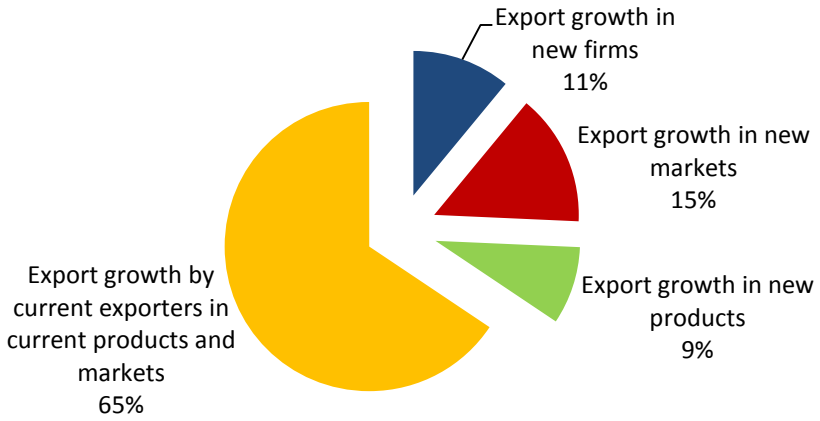
21. A high reliance of export growth on the intensive margin is not unusual for a country at Turkey's stage of development. Figure 6 compares Turkey's share of export growth on the intensive margin with countries across a range of development levels and geographies. [15] The data suggests there may be a decreasing contribution of the intensive margin at higher stages of development, as companies close to the technology frontier need to innovate more to remain in business, producing a diversified set of goods and services, and firms move beyond local and traditional markets. For example, the extensive margin accounted for 60 percent of France's export growth over 2002-2007, of which 27 percentage points was accounted for by the replacement of less efficient with more efficient firms, 20 percentage points from new market entry and the phasing out of slow-growing markets, and 13 percentage points from focusing on exporting new and higher value products (Bricongne et al. 2011). For commodity exporters, this experimentation may be slower and the relative contribution from the intensive margin higher. Indeed, this is what emerges from the scatter-plot, where the countries who rely most on the intensive margin are all significant exporters of commodities, with the notable exception of Turkey.

14 There is a fifth route to growth, which is part of the intensive margin but difficult to isolate – this is the 'quality margin', or the increase in price achieved by exporters (relative to exporters from other countries for the same product and market)

15 Measured by the log GDP per capita at purchasing power parity (PPP) in international dollars (constant 2005 value)

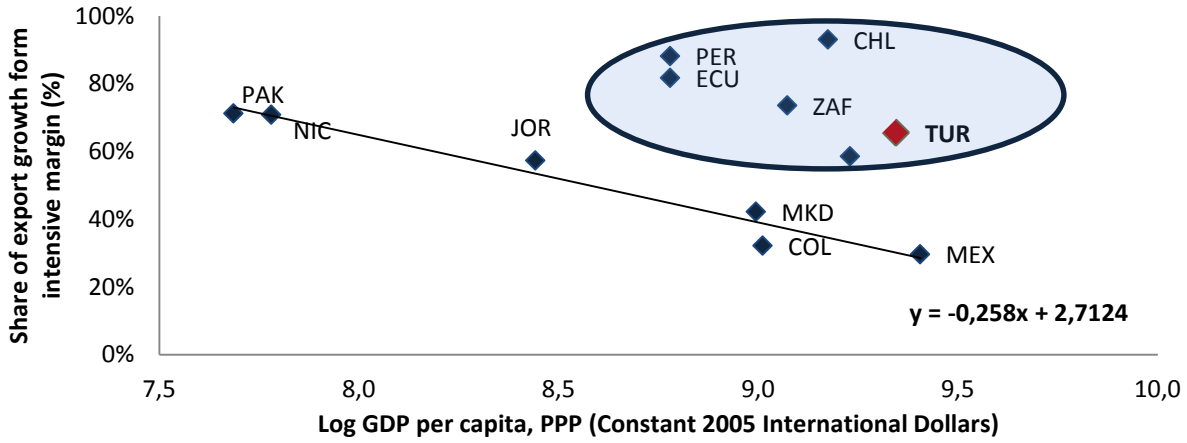
Figure 5: Average firm-level export growth decomposition, intensive and extensive margins, 2002-2011

(In percent)



Source: World Bank staff calculations based on data from TurkStat.

Figure 6: Participation of the intensive margin to export growth at different levels of development

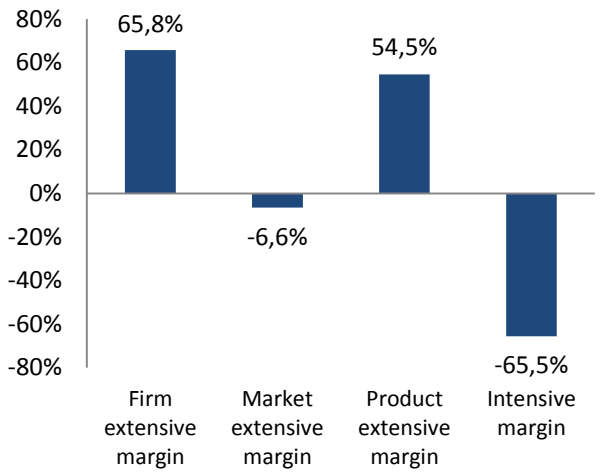


Source: World Bank staff calculations based on data from TurkStat, World Bank's Exporter Dynamics Database and WDI.
Note: Due to data availability constraints, data for each country are an average across different years. See background paper for details.

22. However, extensive margin performance, particularly firm and product entry, is critical for overall export growth. Figure 7 shows that there is a high correlation between Turkey's aggregate annual export growth and the share of it generated by the firm and product extensive margin. By contrast, the participation of the intensive margin seems to be inversely correlated to the country's overall export growth, driving exports in periods of lower dynamism. This suggests that Turkey's exports grow the fastest when new firms start exporting or existing firms introduce new products. Indeed, an econometric assessment of Turkish firm-level data suggests that a one percent increase in firm or product entry leads to a 1.9 percent increase in export growth. By contrast, a one percent increase in market reach leads to 0.25 percent export growth only.

Figure 7: Correlation of overall export growth with the margins of export, 2003-11

(In percent)



Source: World Bank staff calculation based on Customs data from TUIK.

23. The analysis that follows looks at each of the dimensions of the above de-composition in more detail. It shows that Turkey has diversified its export markets and its product range, but has failed to break into high technology segments. It also shows that Turkey's overall positive export performance has been driven by large companies, at the frontier of Turkey's production capabilities while SMEs – if they have entered export markets – have not experienced rapid growth and have struggled to close the productivity gap.

DESTINATIONS OF TURKISH EXPORTS

24. Turkey significantly diversified its export markets over the last decade. Although the EU remained Turkey's most important trading partner, Turkish products entered many new markets. Indeed, relative to the BRICS, Turkey had the second highest level of market concentration of exports in 1999, while a decade later it was one of the most diversified. Over this period, Turkey's index of export market concentration halved (Figure 8). Turkey's exporters also substantially increased their market access, with significant levels of exports now going to 137 countries (Figure 9). This puts Turkey broadly in line with BRICS peers and far ahead of regional ones.[16]

Figure 8: Market concentration vs. the BRICS

(Herfindahl index)

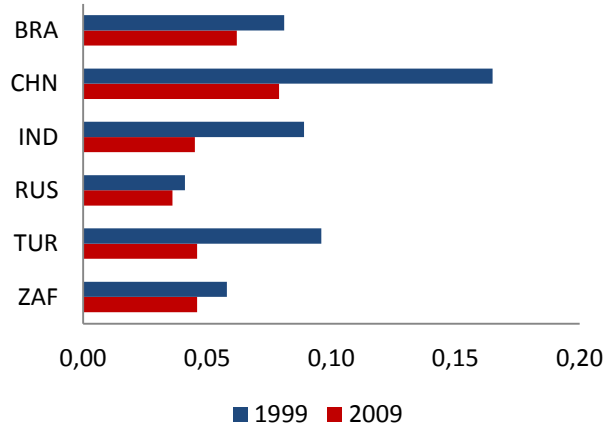
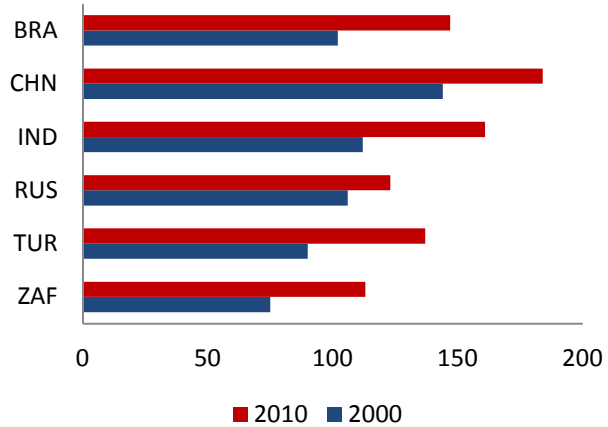


Figure 9: Markets with export sales above US$10 million (number)



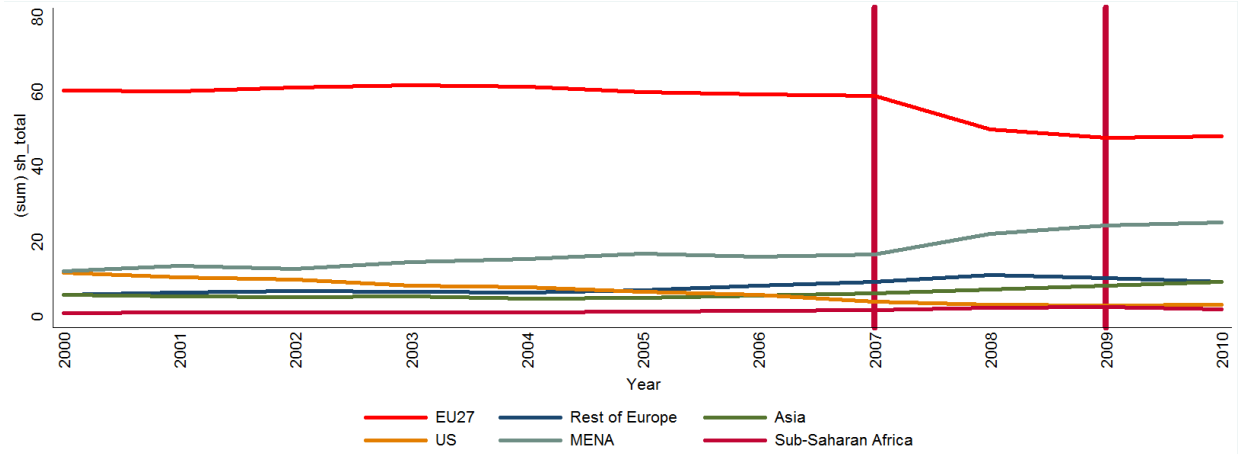
Source: World Bank staff calculations based on data from Commodity Trade Statistics Database (Comtrade) via World Integrated Trade Solutions (WITS).

16 For example, firms in the Czech Republic and Poland reach fewer than 100 export markets.

25. Diversification of Turkey's export markets has been an outcome both of a long term, steady expansion of exports to non-traditional locations and the major shock from the global economic crisis and economic problems in Europe. As Figure 10 shows, the EU remains by far Turkey's largest trading partner, but its relative importance is clearly in decline, with MENA gaining more prominence. While export growth to all regions declined during the crisis, the decline in exports to the EU-27 and the US started earlier, was more pronounced, and lasted longer than the decline in exports to other regions. Even after the rebound in exports in 2010, the value of exports to the US and EU-27 is about 10 percent lower than in 2007 while exports to MENA and Asia are more than 50 percent higher than in 2007. As a result, between 2007 and 2010 alone, the EU-27 share of Turkey's exports declined by more than 10 percentage points, from 59 percent to 48 percent. The biggest winners from this shift were MENA (whose share grew from 16.7 percent to 25.1 percent) and Asia (from 6.5 percent to 9.4 percent). As a result of aggressive market diversification, Turkish exporters' market share in MENA has almost doubled to over 5 percent (Figure 11). The US, meanwhile, continued its long-term decline in importance (linked more to the end of the Multifibre Arrangement in textiles than to the economic crisis), shrinking to only 3.3 percent of Turkey's exports.

Figure 10: Turkey's exports by region: share of total exports, 2000-2010

(In percent)



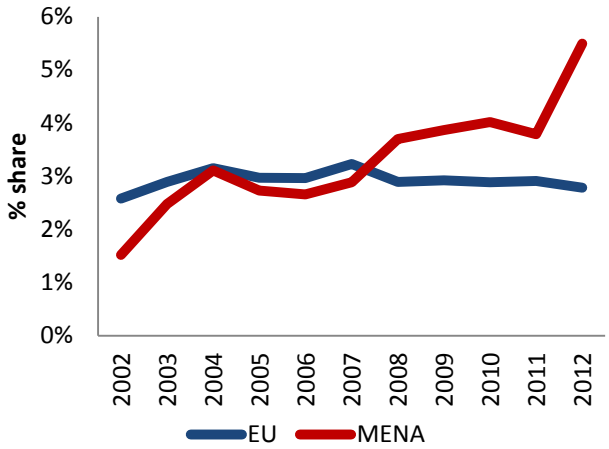
Source: World Bank staff calculations based on data from Comtrade (via WITS)

26. At the country level, the significant diversification of Turkish exports over the past decade is apparent as well. For example, Germany's share of Turkey's total exports was reduced by almost half over the decade to 10.5 percent. In MENA, exports became less reliant on Israel (although it is still one of the main destinations in the region) and more dependent on Iraq, Iran, and the United Arab Emirates. Other non-traditional trading partners that have become significant destinations for Turkish exports over the past decade include Russia, Azerbaijan, and China. Moreover, signing of preferential trade agreements (PTAs) seems to have played a role in facilitating new market entry.

27. Turkey exports different products to MENA and the EU. Exports to the EU-27 are dominated by vehicles and textiles (Figure 12 and Figure 13). These sectors had divergent trends during the past decade, with textiles in decline and automotive exports

Figure 11: Share of Turkish exports in EU (excluding intra-EU imports) and MENA markets, 2002-2012

(In percent)

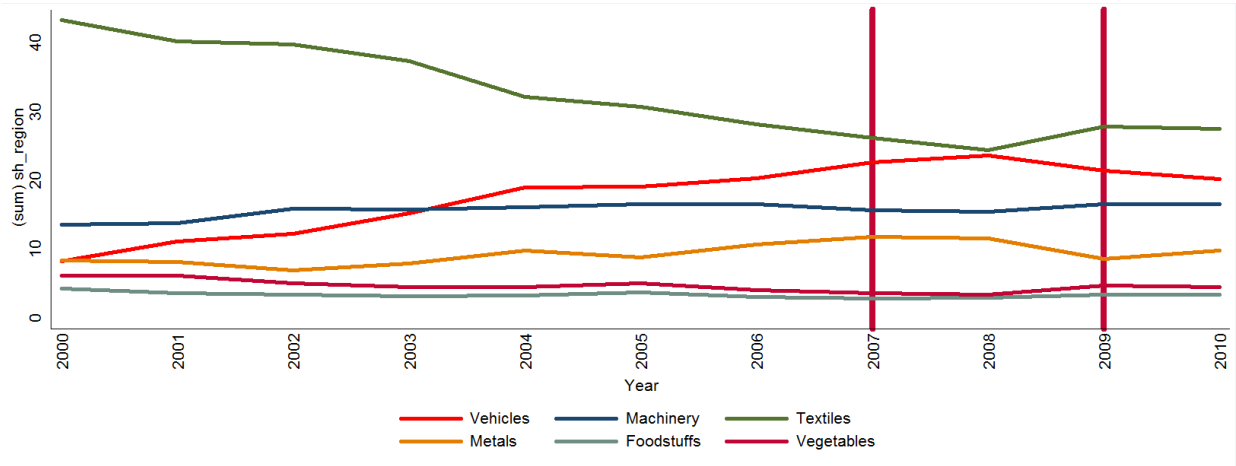


Source: International Monetary Fund (IMF) Direction of Trade Statistics.

in ascendancy, the latter linked with increasing FDI and the integration into regional production networks. Exports to MENA are dominated by metals and to a lesser extent by machinery and textiles. In MENA, both vehicles and textiles declined in importance over the last decade, while metals increased their importance. In fact, metals alone accounted for one quarter of all growth in Turkish exports to MENA between 2006 and 2010 (in 2008, it accounted for half the growth and in 2009 for more than 60 percent of the decline). On the other hand, the shift in relative importance of destination markets is not simply explained by sectoral composition effects. The shift from the EU towards MENA is taking place across all sectors. (Chapter 3 presents an analysis of changes in market patterns through the firm lens).

Figure 12: Turkey's exports to EU-27, 2000-2010

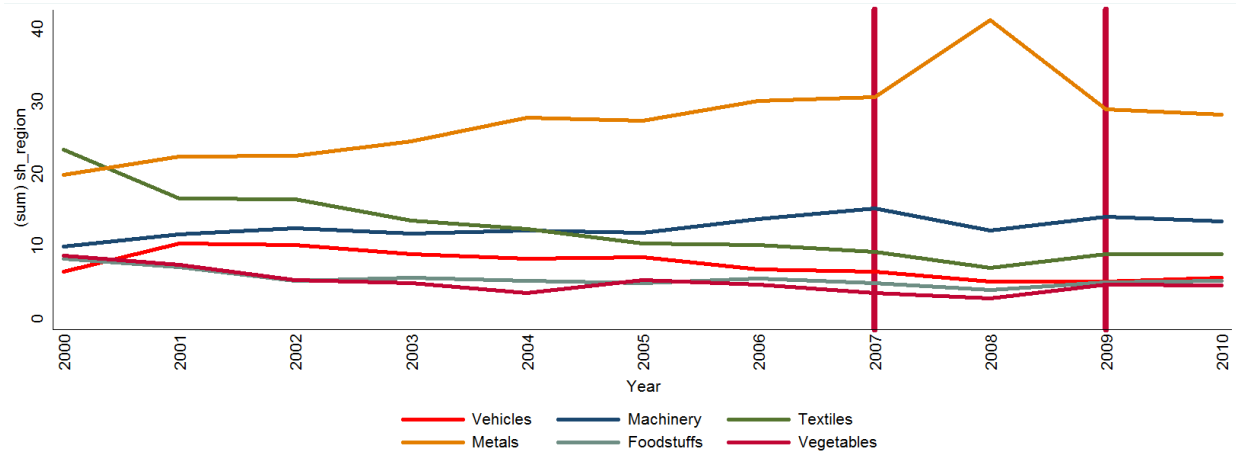
(In percent of exports to the EU-27)



Source: Comtrade (via WITS).

Figure 13: Turkey's exports to MENA, 2000-2010

(In percent of exports to MENA)

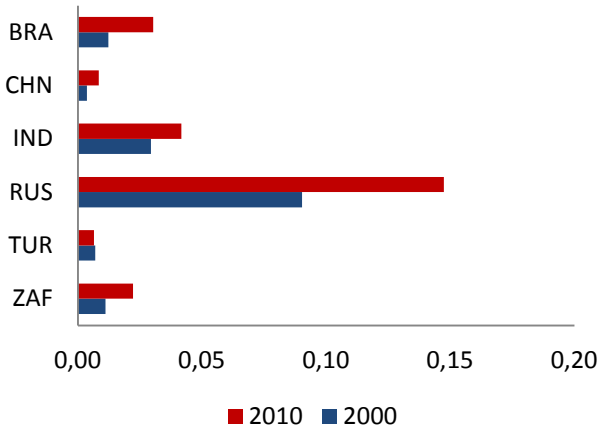


Source: Comtrade (via WITS).

PRODUCT COMPOSITION OF TURKISH EXPORTS

28. Turkey's export basket is highly diversified both relative to the BRICS and regional peers (Hungary, Poland, Czech Republic, and Romania). Among this group, Turkey has the lowest level of export product concentration (measured by the Herfindahl index), and along with Hungary is the only country to have diversified over the past decade. While the top 10 (Harmonized Commodity Description and Coding Systems (HS) 4-digit) products in Turkey's export basket account for about the same share of exports in 2010 as they did in 2000 (26.4 percent in 2010 and 27.5 percent in 2000[17]), there has been an increase in both the range of products being exported and in the strength of some of the non-traditional products. Turkey exports 2.5 times as many products (HS-6) than it did a decade earlier; a faster expansion than all BRICS other than India (Figure 14). The bulk of Turkey's export product expansion occurred between 2000 and 2005. From 2005 to 2010, the rate of expansion of new products in the export basket was just one-third of the 2000-2005 rate.

Figure 14: Product concentration, 2000 and 2010

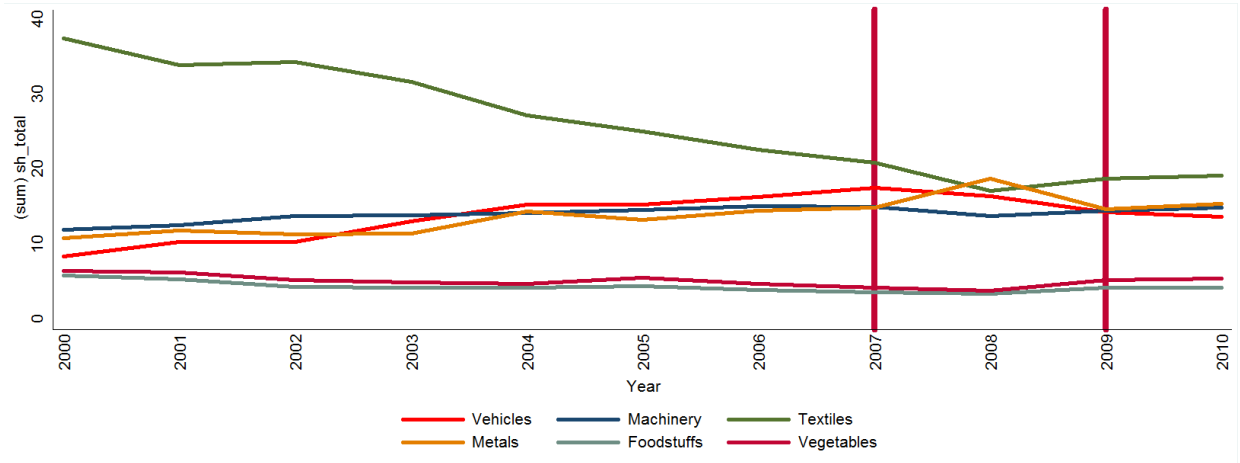


Source: Comtrade (via WITS).

29. There has also been a significant change in the sectoral composition of Turkey's exports over the last decade. The share of the textile and apparel sector, which accounted for 40 percent of exports at the beginning of the decade, declined dramatically (Figure 15). It was replaced in particular by the automotive sector, which grew rapidly during this period, but also by the machinery and metals sectors. This decade-long pattern of structural transformation slowed from 2007, however. Indeed, while the crisis triggered significant shifts in Turkey's export basket from a market perspective, it coincided with a period of relative stagnation from a sector and product perspective, although there was some rise in metals and decline in automotive at the height of the crisis. Export growth after the crisis has been less dependent on vehicles and transport equipment and more dependent on metals, machinery, and textiles, as well as sectors outside the traditionally strong ones. The vehicles sector was the most affected by the crisis and the slowest to recover from it. The food and beverages sector, by contrast, showed resilience to the crisis, and has contributed more to growth after the crisis than the automotive sector.

Figure 15: Exports by sector, 2000-2010

(In percent of share of total exports)



Source: Comtrade (via WITS).

17 In fact, in 2007, prior to the crisis, the share of top 10 product exports reached 31.8 percent

Table 4: Evolution of revealed comparative advantage in Turkey: Top 30 exports, 2000 and 2010

	2000	2010
Articles of apparel and clothing accessories	7.593	4.7218
Vegetables and fruit	6.1032	4.5211
Tobacco and tobacco manufactures	5.2441	2.617
Textile yarn,fabrics,made-upart.,related products	5.0682	4.4863
Sugar,sugar preparations and honey	3.9436	1.0434
Iron and steel	3.0069	3.2269
Crude fertilizers and crude materials (excl.coal)	2.7745	5.3389
Textile fibres (except wool tops) and their wastes	2.29	0.9748
Miscel.edible products and preparations	2.038	1.7492
Animal-vegetable oils-fats,processed,and waxes	1.9937	1.5233
Rubber manufactures,n.e.s.	1.9271	2.047
Non-metallic mineral manufactures,n.e.s.	1.91	1.7832
Sanitary,plumbing,heating and lighting fixtures	1.8502	3.1147
Cereals and cereal preparations	1.7402	1.7336
Essential oils & perfume materials	1.5693	1.1897
Other transport equipment	1.2218	0.55
Coffee,tea,cocoa,spices,manufactures thereof	1.176	0.9115
Manufactures of metal,n.e.s.	1.1438	1.8327
Fixed vegetable oils and fats	1.1236	0.4276
Animals,live,zoo animals,dogs,cats etc.	0.9625	0.4102
Hides,skins and furskins,raw	0.8933	0.0689
Metalliferous ores and metal scrap	0.8368	0.6868
Crude animal and vegetable materials,n.e.s.	0.8174	0.4536
Non-ferrous metals	0.7494	0.8516
Miscellaneous manufactured articles,n.e.s.	0.7263	0.8516
Telecommunications & sound recording apparatus	0.7128	0.3879
Furniture and parts thereof	0.6595	1.4032
Road vehicles (incl. air cushion vehicles	0.6249	1.6287
Dyeing,tanning and colouring materials	0.5931	1.0344
Power generating machinery and equipment	0.591	0.8167

Source: World Bank staff calculations based on data from Comtrade (via WITS); Notes: products in bold are those with an RCA >1.00 in 2010; products highlighted in green indicate increase in RCA between 2000 and 2010, in red a decline in RCA, and in yellow no significant change.

30. Accordingly, Turkey developed revealed comparative advantage in new sectors (Table 4). Turkey maintained revealed comparative advantage (RCA) in a number of resource-based export sectors including those related to metals (e.g. iron and steel), agricultural products (sugar, tobacco, fruit and vegetables), as well as in textiles, and some chemicals. The country also developed RCA in road vehicles, dying, tanning, and coloring of materials. However, most of the products that had the highest RCA in 2000 experienced declines in RCA over the decade – all of the top 5 RCA products and 8 of the top 10 had lower RCA in 2010 than in 2000. The products with the highest growth in RCA over the decade included: fertilizers; sanitary, plumbing and lighting fixtures; non-ferrous metals; furniture; road vehicles; dying, tanning, and coloring of materials; and power generating machinery and equipment.

Box 1: Export sophistication and complexity– measurement and caveats

Calculating export sophistication (EXPY) is a two-stage process. The first stage is to measure the income level associated with each product in the world (PRODY). The PRODY of a particular product is the weighted average GDP per capita of the countries that export the good. The weight given to each country is based on revealed comparative advantage. Therefore, a product that typically makes up a large percentage of a poor country's export basket will have stronger weights towards poor countries' GDP per capita. This will be less the case for a product that makes up a small percentage of a poor country's exports but is a significant component of many rich countries' export baskets.

The second stage is to measure the income associated with a country's export basket as a whole (EXPY). The EXPY is calculated by weighting these PRODY of each product by the share that each good contributes to total exports. For example, if butter makes up 15 per cent of a country's exports, its PRODY will be given a weight of 0.15.Countries whose export baskets are made up of "rich-country goods" will have a higher EXPY, while export baskets made up of "poor-country goods" will have a lower EXPY.

$$PRODY_k = \sum_j \frac{\left(\frac{x_{jk}}{X_j}\right)}{\sum_j \frac{x_{jk}}{X_j}} Y_j \qquad and \qquad EXPY_i = \sum_k \left(\frac{x_{ik}}{X_i}\right) PRODY_k$$

The concepts of PRODY and EXPY are, however, not free of criticism. PRODY of some products are counter-intuitively high suggesting sophistication in products merely because rich countries produce them: bacon and ham, for example, have a higher PRODY than internal combustion engines. Further, the quality of products varies (even if they all have an identical code at the HS 6-digit level) – cars from Country X may not be the same quality as cars from Country Y. When product quality is not taken into account, EXPY overestimates the importance of sophisticated products from low-income countries. Xu (2007) shows that once products at the HS 6–digit level are further divided by relative unit values, the structure of China's exports is consistent with its level of development. This has led authors like Lederman and Maloney (2012) to point out that how a country produces an export matters more than what it produces. Seemingly high-tech products like computers can be produced in low-tech ways, and vice-versa.

Furthermore, because of fragmentation of production, while the final export of a sophisticated product might be from a low-income country, its contribution might have just been in the final assembly of high-value intermediate inputs made elsewhere. One should not, therefore, lose sight of the entire value chain and explore which stage of production creates and captures the greatest value. Even if computers are deemed not to be sophisticated because the final assembled package is exported from a low-income country, the innards could be highly skill-intensive possibly imported from richer countries. Koopman et al. (2008) estimate the foreign content in China's exports to be about 50 percent overall, and 80 percent in sophisticated products like electronic devices. In the well-known example of the iPod, an overwhelming share of the final assembled value of an iPod exported from China is captured by the creators of intellectual property, and not in the form of wages earned by the assemblers.

More recently, Hausmann, Hidalgo et al (2011) have improved on this measure by moving away from the reliance of PRODY and EXPY on the income levels of countries. Under the new approach – 'The Product Complexity Index' – complexity is a function not of incomes of countries but is calculated through an iterative process based on the network of relationships of countries and the products they export. Specifically, under this new approach the complexity of a country's export basked is a function of two concepts: i) The diversity of products it produces (i.e. the number of distinct products that it makes); and ii) the ubiquity of those products (i.e. how many other countries make that product). It is generally observed that a county which can produce a complex product that few other countries are able to produce will also produce a wide range of non-complex products; the opposite is rare. Thus, a product that is made by only a few countries, which also produce a wide range of other products, is relatively complex. In contrast, a product that is produced by most countries, including by countries that produce few other products, is less complex.

SOPHISTICATION AND QUALITY OF TURKISH EXPORTS

31. What countries produce, and how they produce it, matters for export growth. All else being equal, goods that embody greater value addition in terms of ingenuity, skills, and technology fetch higher prices in world markets. This seems clear and uncontroversial. But in a world of integrated production networks it is often difficult to be clear on exactly which exports embody 'high-level' technologies and which types of products and processes contribute best to upgrading and growth. It is therefore important to unpack terms such as export "quality" and "sophistication" to understand better what value a country derives from the specific products it produces and from its position within globally integrated production networks. This is an area of considerable, ongoing debate and a methodological preamble is thus important.

32. Hausmann, Hwang and Rodrik (2007) argue that exporting more sophisticated products leads to faster growth, due to the prospect of benefitting from higher spillovers of knowledge and technology embodied in these products. If a product, say, an internal combustion engine, is largely produced by rich countries, that product would be revealed to be 'rich' and sophisticated. Similarly, coffee beans would be classified as having low sophistication, as low income countries dominate coffee bean production worldwide. The sophistication of a country's export basket – denoted as 'EXPY' – derives from the sophistication of the basket of individual products (denoted as 'PRODY') it exports. Hausmann, Hwang and Rodrik (2007) show that countries with high EXPY tend to have higher growth rates in the future, supporting the idea that countries 'become' what they export by converging to the income level implied by their export baskets. Yet, this may only be part of the story because the same final product could be produced in different ways that embody more or less technology and because the production of one good may be separated into a variety of tasks, each requiring different levels of technology and knowledge. How you export may matter as much as what you export (see Box 1 for a more detailed explanation of the concepts). With these caveats in mind, what does the product composition of Turkey's exports tell us about the country's chances to break into high income?

33. Turkey has significantly increased its medium-technology exports, but the share of its high-tech exports in total exports was stagnant. The share of medium technology exports in total exports increased by more than half over the last decade from 20 to 32 percent, while high technology exports failed to gain a foothold in the export basket (Figure 16 and Figure 17 using Lall classification). Indeed, Turkey compares unfavorably in this respect with all of its competitors in Central and Eastern Europe, which seems to have benefited far more from technology transfer through FDI and the integration into European production networks. In line with developments in these comparators, the growth of medium technology exports as a share of total exports has stagnated and slightly declined since 2007, most likely linked to the decline in automotive exports.

Figure 16: Medium tech exports, 2000-2010

(Percentage of total exports)

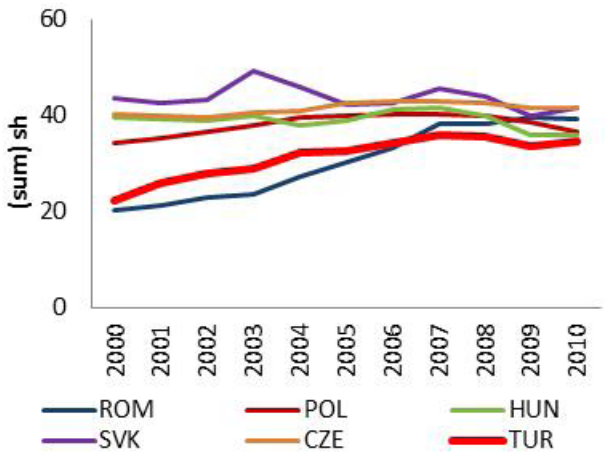
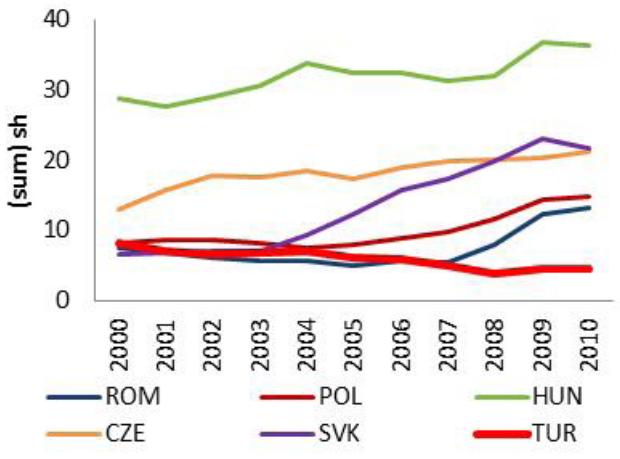


Figure 17: High tech exports, 2000-2010

(Percentage of total exports)

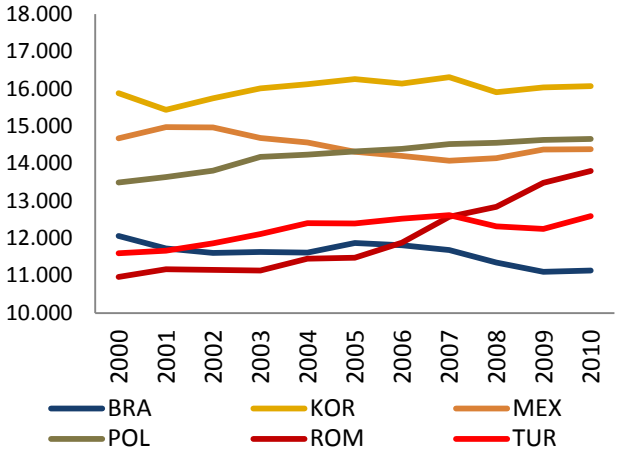


Source: World Bank staff calculations based on data from Comtrade (via WITS). [18]

18 Technological classification is based on Lall (2000).

34. Sophistication of exports improved through 2007. After increasing almost 20 percent between 1997 and 2007, the index of export sophistication (EXPY) declined between 2007 and 2009, but regained most of this ground again in 2010 (Figure 18). The increasing importance of mid-tech exports (mainly automobiles and auto parts) played an important role in the evolution of Turkey's EXPY as they replaced less sophisticated products (garments and textiles) as the top export sectors and allowed the country to narrow the gap with countries such as Poland and Mexico until 2007. The complexity measure reveals a broadly similar pattern to EXPY. The decline in export sophistication and complexity after 2007 can be at least partially attributed to the commodity price boom of 2008[19] and to the decline in automotive and other mid-tech exports to the EU.

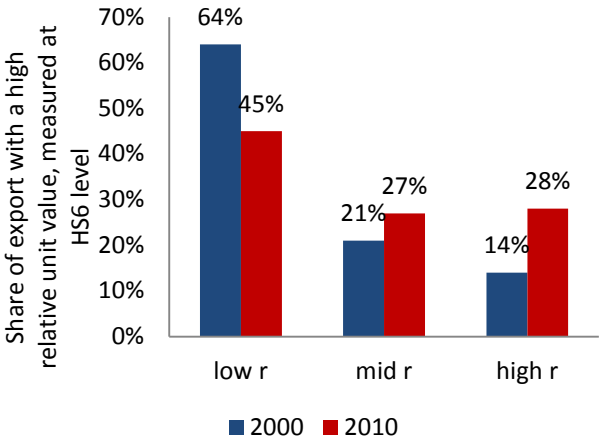
Figure 18: Export sophistication (EXPY), 2000-2010



Source: World Bank staff calculations based on data from Comtrade (via WITS).

35. Based on an analysis of unit prices, the relative quality of exports improved over 2000-2010. Figure 19 shows that while in 2002 two-thirds of exports were concentrated in products which were sold at a unit price in the bottom third of the price distribution, i.e. compared to the price of all competitors selling to the same destination market, by 2010 the majority of products were sold at the middle or high end of the quality range, including 28 percent in the top third of the destination-adjusted price distribution (double the level of 2002). Thus, in less than a decade Turkey's export quality distribution improved significantly.[20]

Figure 19: Price/quality (export unit value) distribution across unit value categories, 2000-2010



Source: World Bank staff calculations based on data from Comtrade (via WITS).

36. The concept of quality ladders provides a useful way to illustrative how exporters may differentiate their product within a given category. Low quality, cheap products are at the bottom of the ladder, high quality, expensive products at the top. For such an analysis of quality ladders, one looks at all the exporters selling a particular product in the same destination market, and compares unit prices across this specific market. Quality ladders are a tool to benchmark an exporter's position in a differentiated product space across products and destination markets.

37. Overall, the quality of Turkey's exports has improved remarkably, especially in those sectors where quality standards matter most, such as machinery. Turkish exporters have climbed up the quality ladders but the patterns differ across product categories and between the EU and the MENA markets. Specifically, across the main product categories the following trends can be established:

19 The commodity price boom affected Turkey's EXPY by increasing the value (and share in total exports) of raw materials and commodity exports, because commodities are less sophisticated than other products (e.g. manufactures), the overall EXPY would decline. The decline of world trade in 2009 affected Turkey's EXPY by reducing disproportionally exports to developed countries (especially the EU-27, the main destination of more sophisticated goods) than exports to developing countries.

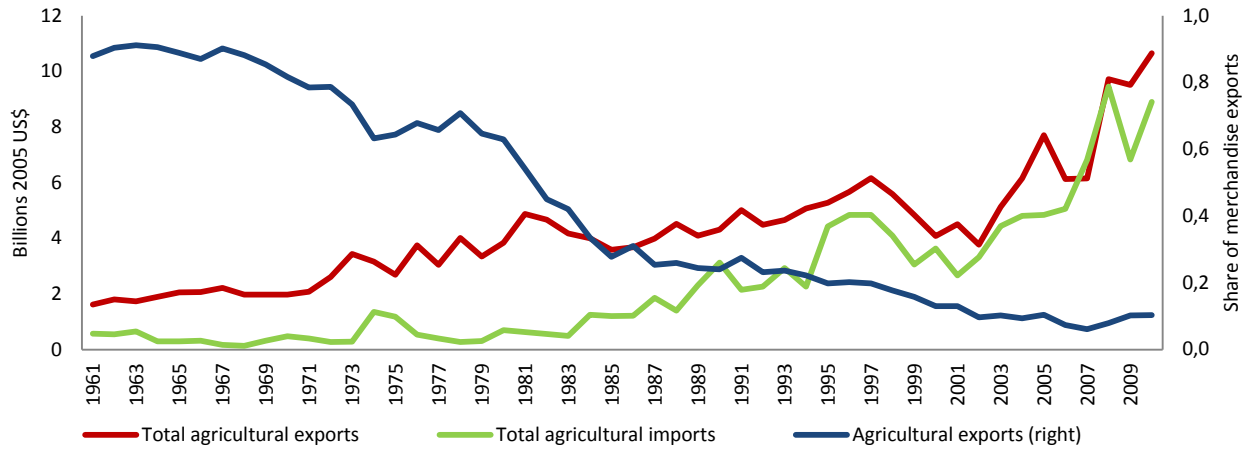
20 Unit price differences across products of the same category intuitively reflect differences in product quality. Thus a BMW is not the same as a Geely and does not cost the same, even though both are counted as a vehicle in standard product classifications, even at highly disaggregated level. A number of other factors may, however, account for unit price differences, and hence careful interpretation is in order. For references establishing an empirical link between product quality and unit values of exports see Crozet et al. (2012), Manova and Zhang (2012).

- *Agri-food sector*: Turkey has been in the lower part of the quality ladder during the entire period and for exports to both the EU and to MENA. The quality ladder is significantly longer in the EU than in MENA, but the difference between the two was reduced by one third between 2000 and 2008.
- *Auto and auto-parts*: The ranking of Turkey went up in the EU between 2000 and 2008, but decreased somewhat in the MENA region due to the entry of many more competitors mainly from East Asia.
- *Other Vehicles*: The positioning of Turkey improved substantially from 2000 to 2008 in both the EU and MENA. In the latter its positioning is at the top of the range along with France, Sweden, Canada and Japan.
- *Electrical and mechanical machinery*: In both sectors the ranking of Turkey improved dramatically in the MENA market. Its ranking in the EU market on the other hand remained at the bottom of the range.
- *Textiles and Clothing*: The ranking remained unchanged in both regions.

SECTORAL FOCUS: AGRICULTURE TRADE

38. In light of rising global food prices since the mid-2000s, the agricultural sector deserves special attention. Agricultural exports have grown vigorously since 2007-2008 and agriculture still accounts for a quarter of Turkey's employment and about eight percent of GDP. Buoyant external demand has focused the attention of policy makers on the relative competitiveness of agriculture and the potential to leverage pull factors more effectively.

Figure 20: Agricultural exports and imports and agricultural exports as a share of merchandise exports, 1961-2010

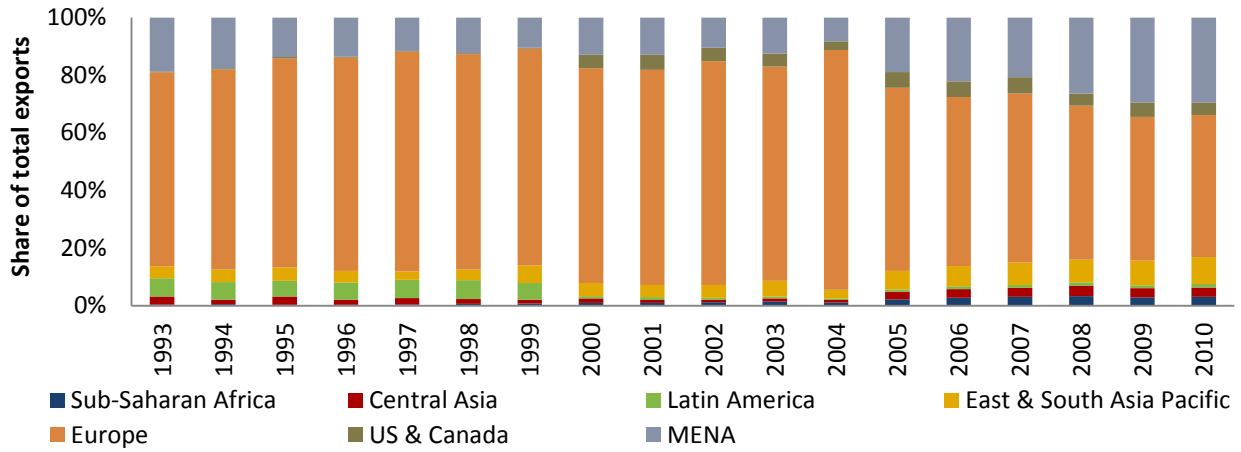


Source: FAO (2012).

39. Agriculture's share of overall trade has been shrinking as has the gap between exports and imports of agricultural goods. As shown in Figure 20, while agricultural exports from Turkey have grown rapidly, especially since 1990, in relative terms they have declined in importance and currently comprise around 10 percent of total shipments abroad, down from a dominant 90 percent in 1961. Yet, Turkey is the 10th largest agriculture exporter among the countries of Europe, Central Asia, North Africa and the Middle East, and 17th largest importer. Moreover, the value of Turkish agricultural exports improved over time, and import and export values are now comparable (see Annex 2 for more background on the sector).

40. Europe remains the single most important destination for Turkish exports, despite a recent shift to MENA. About 30 percent of all agricultural exports in 2010-12 were destined for Europe (Figure 21). However, in the past five years exports to MENA have surged and the region accounted for nearly 30 percent of agricultural exports in 2010.

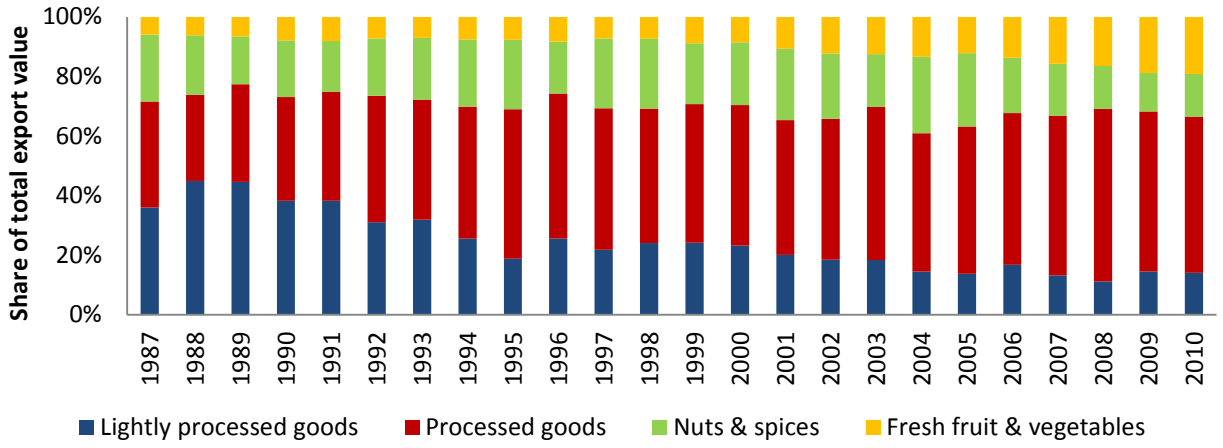
Figure 21: Composition of Turkish exports by destination region, 1993-2010



Source: FAO (2012) and World Bank staff calculation.

41. A change in product composition also accompanied shifting geographic orientation. Figure 22 shows the composition of exports, categorized by the type of processing involved. The first category includes unprocessed cereals, like wheat and barley, and lightly processed animal products, like wool and fresh meat. Processed goods include products like flour, juice, pastry, dried meat and hides. Fresh horticultural goods, and nuts and spices are listed separately, since the items included in these two categories often require special handling akin to processing.

Figure 22: Composition of exports by processing type, 1987-2010



Source: FAO (2012) and World Bank staff calculations.

42. The share of both processed goods and fresh fruit and agriculture increased. As Figure 22 shows, in the late 1980s, most of the value of exports was linked to unprocessed or lightly processed grains and livestock products. Since then the value of processed export goods has grown significantly, as have fresh horticultural exports. The increase in fresh fruit and vegetables exports was driven mainly by exports to CIS, while that of processed goods was driven by the MENA market.

Table 5: Number of exporters and exports, 2003 and 2008

(In percent)

	Exporters		Exports	
	2003	**2008**	**2003**	**2008**
1 to 20 employees	17	10	4	4
21 to 50 employees	38	43	19	13
51 to 200 employees	32	33	18	21
>200 employees	14	15	59	62

Source: World Bank staff calculations based on Enterprise Survey (ES) data from TurkStat. These data cover 42 percent of the total exporters and 25 percent of the total exports.

FIRM LEVEL DYNAMICS OF EXPORT GROWTH: THE MISSING MIDDLE

43. Export growth has been driven strongly by a small number of large and growing firms that operate at a substantial productivity premium relative to the bulk of producers. These firms are driving both intensive and extensive margin growth and are increasingly pulling away from the rest of the economy. On the one hand, this indicates that Turkey's established exporters are becoming increasingly competitive. On the other hand, it also means that although many small firms have entered export markets, their importance in total exports is somewhat small by international comparison. Creating the environment to allow small firms to become dynamic, sustainable mid-sized exporters may be important for several reasons. First, some of tomorrow's large exporters will come in part from today's small firms. Second, as discussed earlier, improved performance on each of the aspects of the extensive margin is likely to be critical to Turkey's future growth. As Turkey's producers move to the technology frontier, exports will increasingly need to rely on frontier innovation. While both large and small companies can be frontier innovators, experience from other countries shows that the contribution of small firms will become more important. Acs and Audretsch (1987, 1988) find that large firms have a relative innovation advantage in capital-intensive industries that produce differentiated goods. On the other hand, they find that small firms have a relative advantage in high-skill intensive, innovative industries.[21] Third, pro-competitive reforms that reduce entry barriers for smaller firms have important implications for economic growth and employment. Using data on 25 transition economies, Aghion, Carlin and Schaffer (2002) find that for both old and new firms, competition pressure raises innovation, thus leading to higher economic growth.[22] Crozet, Milet and Taglioni (forthcoming) investigate the role played by the firms' size distribution in fostering the growth of output and employment at the industry level. Using firm-level data for a large number of European countries, they find that the growth of employment and output is positively correlated with a greater dispersion of firms' size distribution. In most manufacturing sectors, the association of few big firms with a large fringe of small ones seems to be the best configuration to foster industrial performances.[23]

44. Small- and mid-sized firms are relatively underperforming. The share of firms with fewer than 20 employees among all exporting firms fell nearly by half between 2003 and 2008 although their share in total exports remained constant (implying higher exports per firm on average, see Table 5). While mid-sized companies with 21-50 employees increased their share among all exporters from 38 percent to 43 percent, their share in exports decreased from 19 percent to 13 percent. Finally, larger exporters, measured as those with more than 200 employees, and middle-sized firms with 51 to 200 employees, increased both in size (1 percentage point each) and – more than proportionally – in export (3 percentage points each). This breakdown of small, medium, large sized firms differs slightly from the definition used by OECD, for example, which considers firms with less than 250 employees "SMEs".

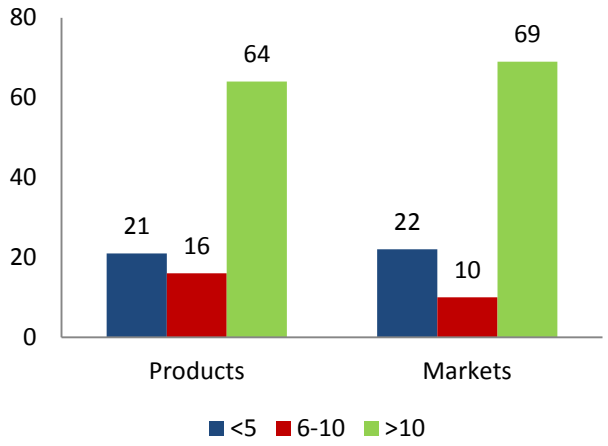
21 Acs , Z.J. and D.B. Audretsch (1987), "Innovation, Market Structure and Firm Size", The Review of Economics and Statistics, vol.69(4), pages 567-574; Acs , Z.J. and D.B. Audretsch (1988), "Innovation in Large and Small Firms: an Empirical Analysis", American Economic Review, vol.78(4), pages 678-690.

22 Aghion, P., W. Carlin and M.E. Schaffer (2002), "Competition, Innovation and Growth in Transition: Exploring the Interaction Between Policies", William Davidson Institute working paper N°501.

23 Crozet M., E. Milet and D. Taglioni (forthcoming) "Firm Size, Firm Heterogeneity and Industrial Performance".

45. A similar message emerges if we look at the scope of firms' involvement in exports. Figure 23 plots the share of export value categorizing firms as follows: 'small' (those selling less than 5 products or to less than 5 markets); 'medium' (6-10 products or markets); and 'large' (more than 10 products or markets). In most countries we see an increase in the share as we move upward in each category. In Turkey, however, there is a dip in the middle – medium-sized firms have a smaller share of exports in output than both small and large firms. Taken together, this evidence suggests there may be a particular challenge for the competitiveness of mid-sized exporters. Indeed average annual export growth was considerably lower for this group of firms: only 8.5 percent, compared to 35 percent, 30 percent and 26 percent for firms with less than 20 employees, firms with 50 to 200 employees and firms with more than 200 employees respectively. Moreover, these firms grew exclusively at the intensive margin. Enterprise turnover in the mid-sized category in fact led to a decline in exports, as existing exporters exited while new entrants did not make up for this loss.

Figure 23: Share of export value by exporter scope

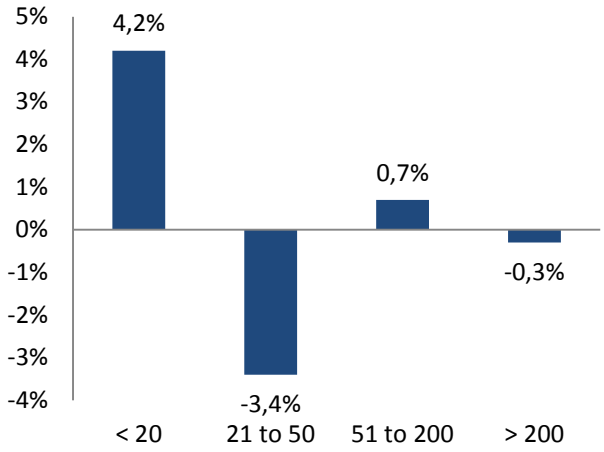


Source: World Bank staff calculations based on data from TurkStat.

46. Mid-sized exporters are suffering from low and declining productivity. Total factor productivity (TFP) figures suggest that the disappointing performance of the small to mid-sized group of firms (20 to 51 employees) may be due to a decline in productivity which affected asymmetrically firms within the group. Figure 24 shows that the average loss for the top 1 percent of firms in this group was 3.4 percent, far below the performance of all other size groups.

Figure 24: Change in TFP, 2003-08 (top 1 percent of firms by TFP)

(Percent change)



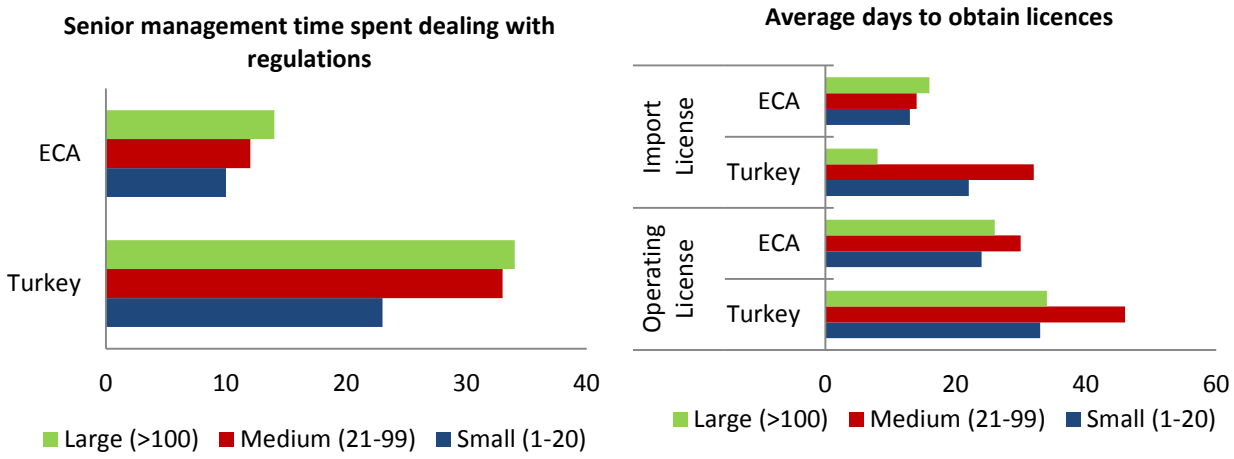
Source: World Bank staff calculations based on ES data from TurkStat. These data cover 42 percent of the total exporters and 25 percent of the total exports.

47. The weak performance of mid-sized firms in Turkey is likely to be a result of significant barriers. One constraint that seems to be specific to mid-sized firms is the regulatory environment.

48. Turkish firms face a considerably more taxing regulatory environment than their peers in the region. Critically, this regulatory environment seems to hit the hardest medium-sized firms (defined here as firms with 21-99 employees). Figure 25 shows that the time required to obtain an operating license is 50 percent higher for mid-sized firms in Turkey relative to the regional average; and that time is – more surprisingly – 30 percent higher for mid-sized firms in Turkey than for both small firms and large firms. Obtaining an import license is even more difficult: it takes twice as long for Turkish firms relative to their regional peers; within Turkey it takes 50 percent longer for mid-sized firms than it does for small firms and four times longer (32 days versus only 8) for mid-sized firms versus large firms. Overall, medium-sized firms in Turkey report that their managers spend fully one-third of their time dealing with regulatory issues, almost three times as long as their counterparts in the Europe and Central Asia (ECA) region and as long as large firms (which in most countries bear the brunt of regulation). Given the significant informality that exists among small firms in Turkey, the gap in terms of the regulatory burden facing small- and medium-sized firms in Turkey is likely to be even more acute than it appears. Thus, firms moving into

mid-sized status may well be seriously encumbered. Since the survey data displayed in Figure 25 dates back to 2008, it would be important, once new data becomes available, to conduct a new analysis to verify whether these findings are still valid.

Figure 25: The 'time tax' on medium-sized firms in Turkey, 2008



Source: World Bank ESs.

CONCLUSIONS

49. Turkey's export performance has been a success during the last decade. The robust growth rate of exports was above the global average and at par with middle-income peers. Turkey companies diversified export markets, exported a wider range of products and moved up the quality ladder in several product categories. However, by and large, the story of Turkey's export expansion is one of existing exporters getting better at exporting existing products and using their market presence in the EU as a springboard to diversify to other destinations. The export boom largely passed by Turkey's medium-sized companies, which raises questions about its sustainability, particularly as the pace of global trade growth slows. It appears from the initial analysis in this chapter that the biases against medium-sized firms in Turkey's regulatory environment may be one reason for the "missing middle" in Turkey's export story. Closing this gap will be critical if Turkey is to be more successful at growing exports at the extensive margin.

50. The following chapters deepen the analysis of export competitiveness at the firm and product level to derive more specific policy recommendations.

3. Competitiveness of Turkish Exports and the Role of Trade Policy

INTRODUCTION

51. Sustained and strong export growth will critically depend on further upgrading of Turkey's export basket. As demonstrated in Chapter 2, Turkey's export product basket has not experienced particularly strong global demand. Moreover, while Turkey has increased overall export sophistication and climbed up the quality ladder, its product composition remains typical of a middle income country. While Turkey has been remarkably successful in diversifying away from the EU market during and following the 2007-2008 crisis, the same firms that learned to be competitive in the EU are driving the expansion to MENA and elsewhere. Turkey's exporters thus need to preserve their strong foothold in Europe, as it seems to prepare them well for expanding into other markets.

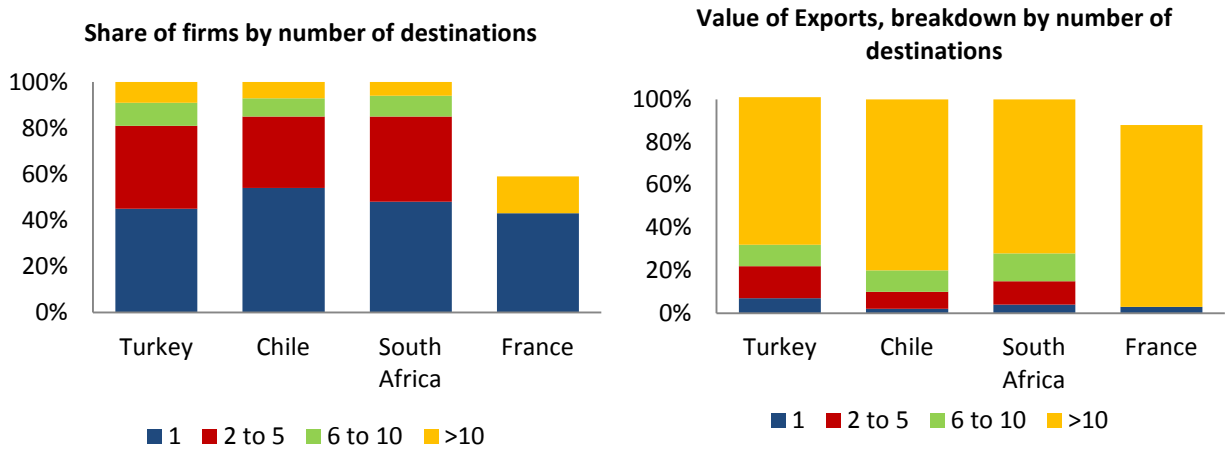
52. This chapter takes a deeper dive into the analysis of Turkey's export competitiveness by destination and at the firm and product level. It asks what scope there is for Turkey to build on its growing presence in MENA to gain further global market share and what it would take to break into the dynamic markets of Asia. A detailed analysis of the determinants of export sophistication and export quality paves the way for the discussion of policy options to enhance export performance with a view to promote sustainable and high growth. Finally, the chapter discusses the potential role of trade policy in Turkey's export competitiveness.

MARKET DIVERSIFICATION[24]

Market diversification through the firm lens

53. Market expansion and diversification is driven by a few leading exporters that supply several foreign markets. Almost half of the firms that export serve only one foreign market – and these tend to be smaller firms (Figure 26). By contrast, less than 10 percent of exporters ship to more than 10 markets – and they account for the bulk of exports. This pattern is not unusual. Data for countries as diverse as Chile, South Africa and France show that aggregate exports are largely driven by a few leading exporters that supply several foreign markets.[25] Clearly, the more markets a firm serves, the larger the number and complexity of trade relationships the firm faces – and that is why few firms are able to cover many markets simultaneously.

Figure 26: Share of firms by number of destinations



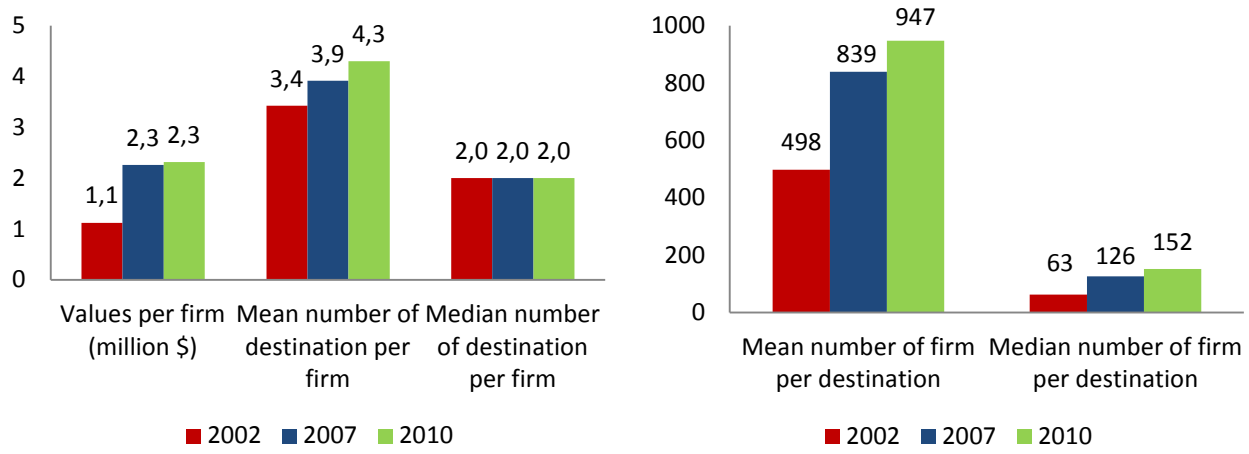
Source: World Bank staff calculations based on data from TurkStat and national authorities from comparators.

24 Although Turkey applies a market diversification strategy which targets a wide range of countries, from East Asia, North and South America, the Commonwealth Independent States, Middle East and North Africa, Sub-Saharan Africa and Europe, the analysis in this chapter focuses mostly on the market diversification efforts towards MENA.

25 In France the extensive margin is large due to new firm entry, and specifically more efficient firms replacing less efficient firms, distinguishing it from Turkey.

54. In the past decade, Turkey generated many new exporters, but few of them expand beyond two foreign locations. Figure 27 provides an overview of the market reach for exporters in 2002, 2007 and 2010. It shows that the average value of exports per firm gradually increased, from US$1.1 million in 2002 to US$2.3 million in 2010. The global crisis represented a setback in terms of export growth, resulting in little progress from 2007 to 2010. Interestingly, while the average number of destinations increased steadily over time, from 3.4 destinations per firm in 2002 to 4.3 in 2010, the median number remained unchanged, at 2 destinations per firm. This confirms that market expansion is driven by the largest exporters, i.e. those able to face the trade costs associated with serving multiple destinations, such as establishing distribution networks, complying with standards and dealing with cross-border trade finance issues, customs. This notwithstanding, market penetration by Turkish firms increased overall. The average number of exporters per destination almost doubled between 2002 and 2010 while its median number increased by 2.4 times over the same period of time.

Figure 27: Number of destinations per firm and number of firms per export destination, 2002-2010

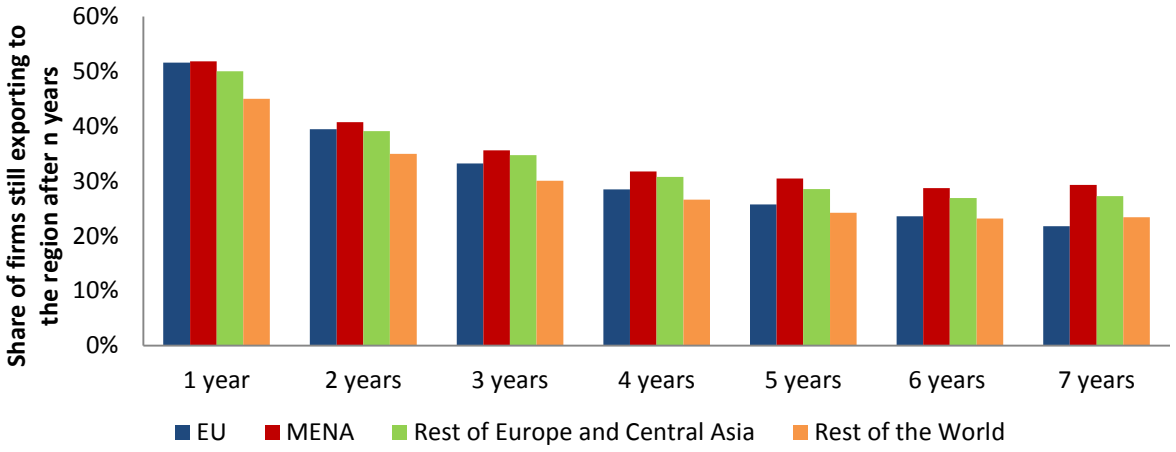


Source: World Bank staff calculations based on data from TurkStat.

55. Given the costs of entering new markets for smaller firms, it is not surprising that the diversification of exports away from the EU towards MENA is largely a story of existing exporters diversifying their customer base. Only four percent of the firms exporting to the EU in 2009, switched to other markets in 2010 (meaning they stopped exporting to the EU and started exporting to other markets). The share switching to the MENA region was one percent. By contrast, the share of exporters expanding to other markets in 2010 was 13 percent, of which 3 percent added MENA. So the growth in exports to MENA is largely the result of natural expansion strategies of existing exporters. A full 71 percent of the exporters that entered MENA for the first time in 2010 expanded there from the EU. This suggests that export experience with the EU is an important springboard to entering MENA and other non-traditional markets. In fact, exporting to EU has a significant productivity premium. Cebeci and Fernandes (2013) find TFP in firms that export to the EU is 8.4 percent higher in the first three years of exporting (compared to firms that do not export), while exporting to MENA boosts TFP by only 2.8 percent and is not statistically significant.

56. Export diversification of markets pays in terms of export survival. The probability of survival beyond the first year is positively affected by a multi-destination strategy. Export spillovers, greater product scope, and the presence of 'big hit' export products also influence survival positively.

Figure 28: Export survival of export relationships in different world regions



Source: World Bank staff calculations based on data from TurkStat.
Note: Survival after 1 year is the average of survival rates between 2003 to 2010, survival after 2 years is the average of survival rates between 2004 to 2010, survival after 3 years is the average of survival rates between 2005 to 2010, survival after 4 years is the average of survival rates between 2006 to 2010, survival after 5 years is the average of survival rates between 2007 to 2010, survival after 6 years is the average of survival rates between 2008 to 2010, survival after 7 years is the survival rates for 2009.

57. Surprisingly, exports to non-traditional markets are more resilient than exports to traditional trade partners. Figure 28 shows that only 22 percent of exporters to the EU and EFTA remained in business seven years after entry in the market. For exports to other regions the 7-year survival rate was higher: 29 percent to MENA, 27 percent to the rest of ECA, and 23 percent in the rest of the world. There are several possible explanations for this. A higher degree of churning – or mortality – in given (e.g. close-by or easier) destinations can be a symptom of lower fixed costs to that destination and higher competition in that market. Econometric analysis also suggests that probability of export survival is lower in thicker export relationships, measured by the count of firm-product pairs active in a given destination. As search and information costs are lower, it is possible that firms use the EU and EFTA market as a testing board for the performance of their exports before aiming at less competitive markets. It is also possible that poorer performing firms self-select themselves out of markets with higher entry costs. Finally, one caveat is that due to the more informal nature of trade – including suitcase trade – with non-traditional partners, export flows to MENA may not capture the most short-lived trading relationships and thus underestimate the degree of churning that actually takes place.

Merits and limits of market diversification

58. Market diversification has been significantly helped by government policy. In the aftermath of the 2001 economic crisis, the contraction in domestic demand and devaluation of the lira formed the basis for the move towards export-orientation. New policies were introduced to expand exports to selected "focus markets", attract more FDI and develop a global "Made-in-Turkey" image. Support programs include trade missions abroad and international trade fair participation. The "focus markets/countries" approach continued into the 2010s. In the context of the committee established for new market penetration, studies have been carried out to identify target countries as well as a different set of "priority countries". For example, the 2012-2013 programs included 17 target countries and 27 priority countries. Exporters to the target countries can receive additional support according to two circulars issued by the Ministry of Economy. [26] The selection of these countries was based not only on the size of the market and openness of the country but also on the availability of financing, the judicial and trade infrastructure, the state of services trade and strategic considerations such as energy links. [27]

26 2009/5 and 2010/6.

27 T.C. Basbakanlik Devlet Planlama Teskilati. 9. Kalkinma Plani 2007-2013, Ozel Ihtisas Komisyonu Raporu: Dis Ticaret, Ankara 2007 and Ministry of Economy website.

59. In the wake of the prolonged crisis in the EU, a lot has been made of Turkey's successful export market diversification as a key risk mitigation strategy. This is true to some extent. To see how much, we estimate the vulnerability of Turkey's exports to a GDP contraction in foreign markets.[28] As Table 6 shows, Turkey is indeed most vulnerable to a contraction of GDP in the EU, because the EU still accounts for the largest share of Turkey's exports. However, the elasticity of Turkish exports to a change in GDP in MENA is in fact higher (0.84 as opposed to 0.79 for the EU). Were Turkey to increase the share of exports to MENA to the current share accounted for by the EU, its vulnerability would actually increase. Moreover, import demand has become much more highly correlated across global markets, due in a large part to the expansion of integrated value chains. This suggests that market diversification may be a less effective strategy to reduce risk than it was in the past.

Table 6: Sensitivity of Turkey's exports with respect to different markets, 2010

Export Destination	Exports to Turkish GDP (share, percent)	Elasticity	Vulnerability
World	14.61	0.61	0.09
EU	**7.87**	**0.79**	**0.06**
MENA	**2.09**	**0.84**	**0.02**
Japan	0.05	0.78	0.00
United States	0.59	0.79	0.00
Brazil	0.09	0.80	0.00
China	0.43	0.78	0.00
India	0.11	0.81	0.00
Indonesia	0.04	0.85	0.00
Russia	0.66	0.77	0.01
South Korea	0.07	0.78	0.00

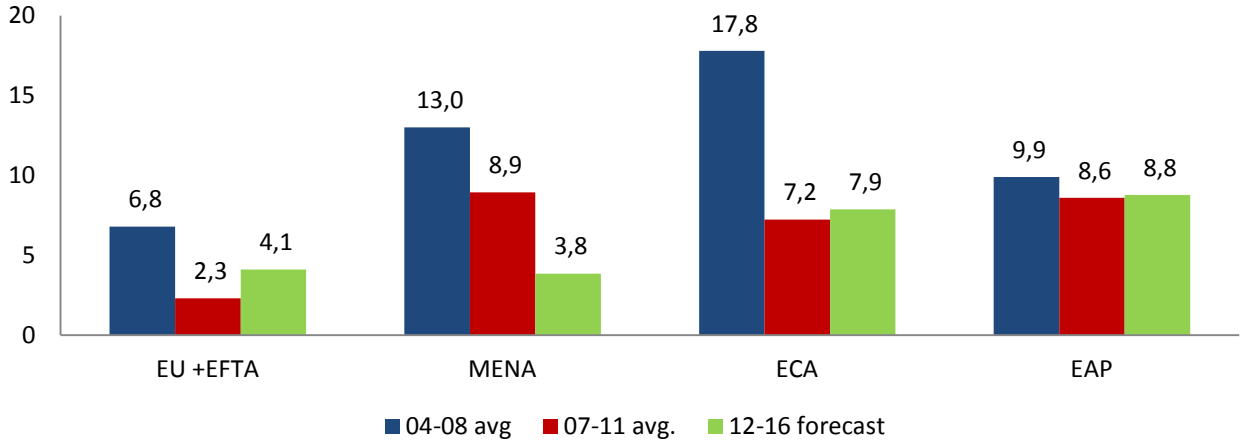
Source: World Bank staff calculations.
Note: The vulnerability is measured as the effect of a 1 percent reduction in GDP of foreign market.

60. The second potential benefit of diversification is that it may allow the country to take greater advantage of the 'pull effects' of growing markets. The evidence presented in this CEM indicates that Turkish exporters received overall a positive pull effect from their geographical composition over the past half-decade. But, while there is clearly further potential for exporters to grow in MENA markets, there may in fact be greater potential both in traditional EU and EFTA markets and in the fast-growing markets of East Asia. Taking advantage of these opportunities may well require a greater step-change in competitiveness than has been required to exploit the MENA opportunity in recent years. This argument relies on an analysis of the relative size of the respective destination markets, their growth prospects going forward and the sophistication of customers in various destinations.

61. While exports to MENA have grown fast, the MENA market as a whole is likely to remain limited. According to data from the IMF, MENA's total imports amounted to US$830 billion in 2010. Germany imported US$1,100 billion from the world in the same year. The market in the EU as a whole is more than 6.5 times larger than that of MENA. This means that even with growth of as little as 1-2 percent a year, the additional market potential generated in the EU will be greater than what is generated in MENA. Moreover, the subdued growth in Europe need not translate directly to lower demand for Turkish exports. In fact, there is evidence that in times of crisis, demand for quality shifts slightly downward (Berthou and Emlinger, 2009). Thus, Turkish exporters may in fact have an opportunity to replace traditional EU-based suppliers in some sectors, as also suggested in focus group interviews with exporters in discussing the 2009-10 period.

28 The methodology to compute sensitivities uses the gravity-model to estimate the elasticity of Turkey's exports with respect to fluctuation in the GDP of major foreign markets. Combining this elasticity with the exposure of Turkey's export basket to each market (export share) provides an indication of the impact of changes in foreign demand on Turkey's exports.

Figure 29: Trends and forecasts of import demand in selected regions
(In percent in annual growth of import demand)



Source: World Bank staff calculations based on IMF data.

62. In addition, import demand growth in MENA is forecast to slow down significantly in coming years after expanding especially rapidly in the last decade. Figure 29, which draws on historical data and import growth forecasts from the IMF, suggests a sharp slowdown in import growth from MENA, to less than 4 percent annually. In fact, even the EU is expected to see stronger average import growth over the next five years than the MENA region. By contrast, Eastern ECA and especially East Asia will continue to experience robust growth in imports. It is however important to note that Turkey is likely to face increasing competition in the EU market, not only from China, but also from countries with whom the EU is currently negotiating FTAs, like the US, India and Japan. The erosion of Turkey's preferential access to the EU and the slow-down in MENA import demand means that increases in competitiveness to withstand competition in the EU and diversification into markets beyond MENA may be key going forward.

63. At the product level, exports to MENA offer some scope for differentiation of the export basket. As also mentioned in Chapter 2, at the aggregate level, exports to the EU-27 are dominated by vehicles and textiles, although these sectors had divergent trends during the past decade: the importance of textiles fell and of vehicles increased. On the other hand, exports to MENA are dominated by metals (e.g. iron and steel) and to a lesser extent by machinery and textiles. Surprisingly, even at the firm level, most exporters are selling different products to the MENA region. Close to half (44 percent) of incumbent exporters newly entering MENA sell exclusive products (HS6) not sold in other markets. In 28 percent of the cases these products even belong to different broad (HS2 digit) sectors.

64. In fact, exports to MENA are more sophisticated than those to the EU, but firms with sales to the EU have higher employment growth. This result is somewhat counter-intuitive, as the EU market would appear to be more sophisticated whilst growing more slowly. Trends in a few product categories drive these findings. The analyses employs two methods; (i) comparing export-destination specific indicators based on Turkey's structure of exports to each destination and the product-specific indicators (see Annex 4) and (ii) estimating the effect of changes in firm's sales structure across markets, on firm employment and wages.[29] The top export to the EU is apparel, which accounts for about 14 percent of total exports. The exports-based PRODY for this industry is about US$9,000 PPP-adjusted from 2000-05. In contrast, the top export to MENA countries was basic iron and steel, encompassing about 16 percent of total manufacturing exports, has a PRODY of over US$19,000 PPP-adjusted dollars. The firm level analysis shows that companies exporting to the EU have faster employment growth but do not pay higher wages.[30]

29 For details, see Cebeci, Lederman, Rojas (2013) Background paper for the CEM.

30 These results may be driven by the strong presence of textiles and clothing sectors in exports to the EU, and therefore do not wholly account for the structural shift from traditional export sectors in the last decade. To be more specific about the structural shift, growth in the number of textile-clothing as well as agricultural product exporters have lagged far behind those experienced in other sectors over the last decade. In fact, Cebeci and Fernandes (2013) document that over 2002-2011, in spite of a mild 44 percent and 54 percent increase in the number of textile-clothing and agricultural product exporters, respectively, increase in the number of exporters in other sectors have been much stronger as follows: transportation vehicles 77 percent, machinery 125 percent, manufactured metals 133 percent, chemical products 138 percent.

65. In sum, diversification into MENA may have its limits going forward even though it presents some welcome opportunities to diversify the export basket. The challenge for Turkey is to identify those markets that have significant potential for high growth in demand.

How much scope is there for further market diversification?

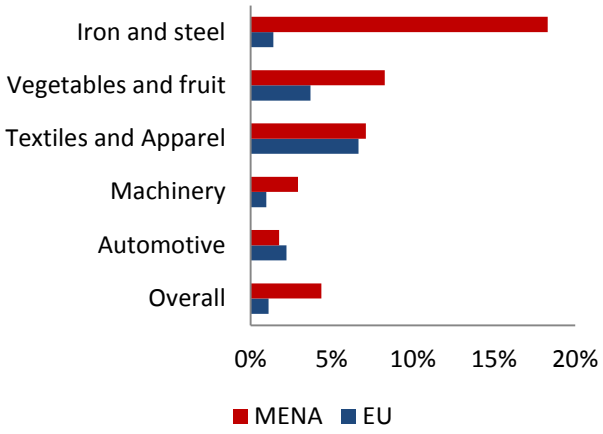
66. The distribution of Turkey's exports in aggregate are roughly in line with what one would expect. A gravity analysis, as the one employed above to look at the vulnerability of Turkey's exports to changes in economic conditions in partner countries, can also be used to estimate whether there are unexploited opportunities to expand exports to particular markets. At the aggregate level, no such unexploited opportunities in bilateral trade exist. However, the index of export market penetration, a measure of the effectiveness of export market reach relative to a country's export basket, indicates that while Turkey compares well over time and with peers, its exporters still reach only 30 percent of potential markets (Table 7). This is only half the level of market penetration achieved by China (which, along with Germany, is the highest in the world). So there are likely to still be unexploited market opportunities within specific sectors and products. Note that Turkey has much deeper penetration of MENA markets than it does in EU markets (Figure 30).[32] Overall, Turkish exports account for 4.3 percent of all imports in the MENA region versus only 1.1 percent of imports to the EU region. In fact, for all of Turkey's main export sectors with the exception of automotive, market penetration is already higher in MENA than in the EU.

Table 7: Index of export market penetration[31]

	2000	2010	Percent Growth in IEMP (2000-2010)
China	33.8	63.5	88%
India	19.9	33.4	68%
Turkey	17.9	29.7	66%
South Africa	14.4	18.3	27%
Brazil	12.7	16.5	30%
Russia	12.0	12.3	3%
Poland	5.7	23.2	308%
Czech Republic	16.1	20.5	28%
Hungary	10.9	12.0	10%
Romania	5.3	10.2	91%
Bulgaria	5.5	8.5	55%

Source: World Bank staff calculations based on data from Comtrade (via WITS)

Figure 30: Market share of Turkish exports



Source: World Bank staff calculations based on data from Comtrade (via WITS).

67. Access to export markets is however only one dimension of a country's trade and investment links with other countries and regions. For a fair assessment of the merits of market diversification, it is essential to recognize the spillovers from a strong trade and investment relationship with the EU, such as technology transfer, that helps upgrading the export basket, in addition to the export value generated. So, the remainder of this report broadens the analysis presented so far, from a pure market perspective to one that centers on "upgrading exports". In order to do that, the next two sections dig deeper into the product level determinants of export performance, including from a firm perspective, before Chapter 5 presents an analysis of Turkey's integration in value chains.

31 Brenton and Newfarmer (2007), background paper for the CEM.

32 For this analysis we analyze Turkey's exports to MENA and the EU against all countries exports to MENA and the EU, based on data reported in Comtrade (via WITS). We do not take into account forecast growth in import demand across the regions.

PRODUCT QUALITY AND UPGRADING: DETERMINANTS

How is Turkey's current export basket positioned for future growth?

68. Turkey's current export basket is not one experiencing strong global import demand. The growth decomposition in Chapter 2 indicated that Turkey's export growth was impacted negatively by its sectoral composition. This is reinforced by an analysis of the dynamics of Turkey's top 20 exports (Figure 31), which shows a clearly downward sloping trend. That is, the important products in Turkey's export portfolio and the products in which Turkey is growing its world market share fastest are products that grew below world average rates in the five years to 2010.

Figure 31: Growth orientation of Turkey's export products (Top 20 exports)

Source: International Trade Commission (ITC) TradeMap.

69. Turkey does not seem to have potential quick gains based on its current export structure. There do not seem to be any obvious "missed opportunities" in terms of products or sectors that are attractive (high growth, sophisticated) and which exporters could easily start exporting. The analysis – presented in more detail in Annex 5 – shows that Turkey already has a comparative advantage in "low hanging fruits," i.e. products relatively close to its current export structure and the highest (global demand) growth products are relatively far away from the country's current export basket. Altogether, the findings suggest that major efforts are needed for Turkey to acquire a comparative advantage in promising untapped products.

70. However, this does not necessarily mean that Turkey is trapped in 'the wrong' products. There are two reasons for this. First, an analysis of relative growth in export products is biased in recent years by the

strong growth performance in commodities. Indeed, many of the products that appear to have 'high growth potential' for Turkey based on this type of analysis are commodities – e.g. pearls and precious stones; metals; ores; and slag and ash. Measured against the commodity boom, most manufactured products will appear to be less dynamic. Second, it may be the case that weaker relative growth performance in some key sectors like machinery, automotive, and iron and steel is a cyclical phenomenon, with recent growth performance being strongly impacted by the crisis. As commodity prices stabilize, growth performance in manufacturing will look relatively (if not nominally) better. Furthermore, the picture looks favorable in some important sectors such as apparel, electrical equipment, and fruits and nuts, where growth has been above global average rates and Turkey is expanding its share.

71. Whatever the future trajectory of demand for Turkey's export products, the country cannot rely on "demand pull" alone to achieve its export targets. Turkey's largest exports are in sectors which increasingly face strong global competition. Turkey will need to focus on improving competitiveness in existing export products to gain market share, while gradually shifting the export basket towards more dynamic products, with higher technology content and greater expected productivity spill-overs. To achieve both will require an upgrading of Turkey's physical, human and institutional capital assets.

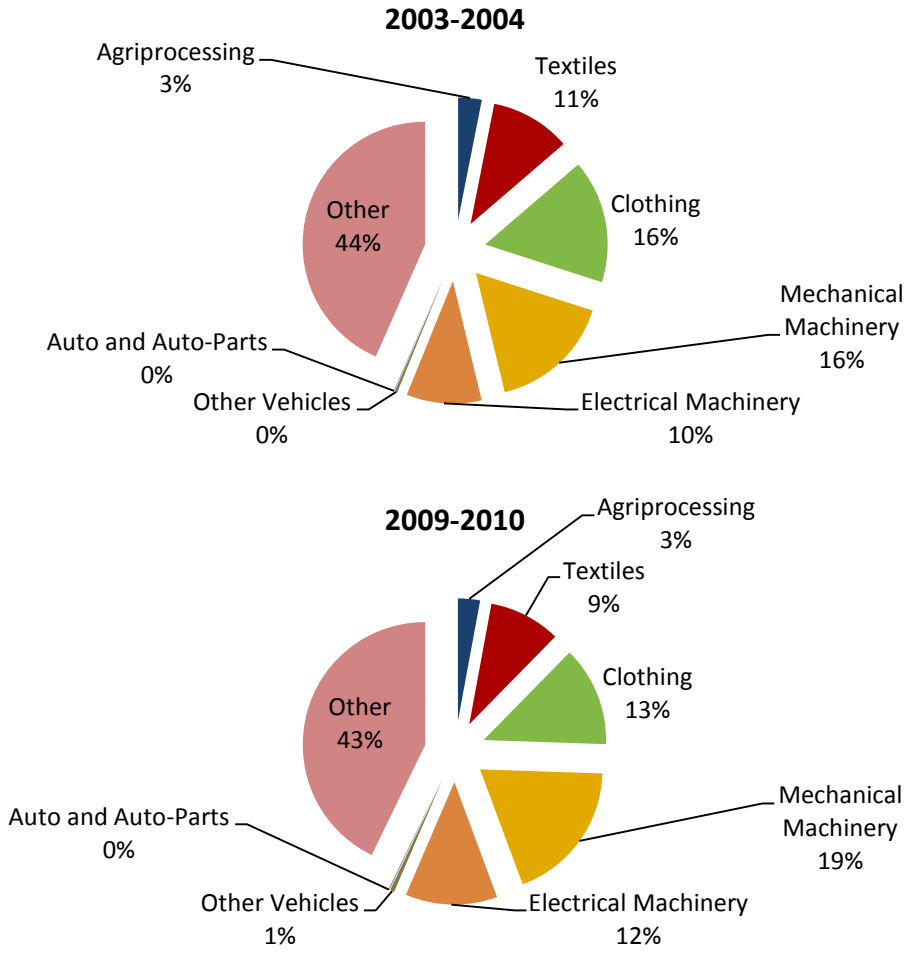
Firm-level Dimension of Sectoral Composition

72. Individual exporters are not shifting from declining to growing sectors. Intra-firm shifts between sectors at the HS2 level of aggregation were minimal during 2002-2011, accounting for less than one percent of export growth in any year. It seems the shifts in the sectoral composition of exports were largely the result of different growth dynamics of firms in these sectors. First, existing (mainly large—with more than 200 employees) exporters in the emerging sectors have grown faster than firms in traditional sectors. Second, the entry of new exporters increased in the emerging sectors but slowed in the traditionally strong sectors. This is shown clearly in Figure 32: for example, export entry declined by almost 20 percent in the clothing sector and 11 percent in textiles between 2003-2004 and 2009-2010, while it grew by more than 13 percent in mechanical machinery, more than 18 percent in electrical machinery, and almost 38 percent in vehicles and auto parts.

73. The intensive margin drove export growth over the past decade. This suggests that exports are dominated by large multi-product firms which increased exports of existing products. While the mean number of products per firm is relatively stable (8 in 2002 and 9 in 2010), the average value of each exported product increased three-fold over this period to US$24 million per product. The limited product expansion that did occur appears to have come primarily from the large firms, as the median number of export products remained unchanged at 3 per firm.

74. The route to product-driven export growth is through sophistication, quality and value addition. Although what countries produce is important, how they produce them is what matters most for sustainable export growth. Chapter 1 portrayed the characteristics of exports and trends over the last decade. The following section discusses the determinants of export quality and value addition, which both contribute to export growth.

Figure 32: Export entry by sector, 2003-2004 and 2009-2010



Source: World Bank staff calculations based on TurkStat data.

Determinants of Export Quality

75. High quality exports are positively affected by high quality imports and foreign ownership. This result is derived from an estimation of the determinants of the probability of a Turkish firm exporting a good with a relative unit value above the median in the period 2006-2008. We find that being a large firm, being fully foreign owned and relying on imported inputs– in particular when these are of high quality – increases the likelihood of exporting goods with a relatively high unit value compared to the average quoted in a given destination market. High unit values are also negatively associated with trade costs, confirming that trade of high value added goods is able to reach destinations that would be too costly to reach with less valuable goods is an important source of cost-competitiveness. By contrast, PTAs and the real exchange rate do not appear to have a significant effect on the quality of exports proxied by the relative unit value.

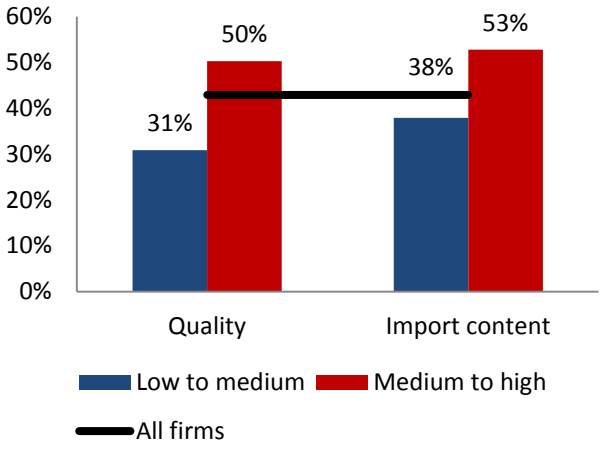
76. Moreover, firm and product entry are both correlated positively with higher unit values. New entrants are more likely to quote higher unit values, and so are firms that report producing a new product. While exit rates are also higher among firms quoting higher unit values, presumably because it is more difficult to survive initially in high-end markets, the net effect is still positive. In other words, export growth at the extensive margin relies on higher quality products.

77. Import content and higher unit values contribute to firm survival. Figure 33 shows that the survival rate of firms exporting goods with relative unit values above the median of firms operating in the same HS6 sector is 50 percent, while the survival of firms exporting goods with relative unit values below the median is about 31 percent. Confirming the results from the analysis presented above, there seems to be a high correlation

with import content. The chart shows that firms with import content above the median also outperform by a large measure those with import content below the median. Five years after entry into exports, 53 percent of the firms which import inputs above the median in a given HS6 sector are still exporting, while this figure is only 38 percent for firms with an import-to-turnover ratio below the median. Interestingly, the relationship between quality and imported inputs decays over time, suggesting that exporters may over time shift to domestic suppliers. It is also worth noting that investments in quality pay off more quickly for larger firms than for smaller firms. The latter need a longer time before seeing the beneficial effects on export growth.

Figure 33: Five-year export survival for firms of different export quality and import content

(In percent)



Source: World Bank staff calculations based on TurkStat data.

Determinants of Value Added Growth

78. Nominal export growth is important, but ultimately it is growth in value added that matters. Econometric analysis assessed the effect on value added of several factors and their linkages with import content, quality and sophistication—both for exporters and non-exporters. The results indicate that technology upgrading and absorption – primarily achieved by investment in R&D and imports of intermediates – are important determinants of growth in value added. Among other benefits, more sophisticated and higher quality goods appear to be important for generating high value added. These in turn, are associated with technology upgrading and absorption, as interaction effects computed econometrically suggest. Specifically, the results show that sophistication and quality help boost value added with a lag of five years. R&D investment, on its part, is particularly important for large firms. Sectoral studies unveil sector-specific determinants. For example, for the agriculture sector, there are two key factors that increase value-added. One is the ability to take advantage of natural resources to enhance exports of high-valued fresh fruit and vegetables (e.g. exporting to water-constrained MENA region). The other one is building on the capacity to reliably and efficiently deliver a high quality food product in line with private food safety standards.

79. Given the importance of export quality, of technological upgrading and of access to high quality inputs, what is the role of trade policy in promoting the right kind of export mix? This is a question to which we now turn.

THE ROLE OF TRADE POLICY

80. The extent and form of trade integration has changed dramatically over the last two decades. First, average tariffs globally are much lower today than in the 1990s and quantitative import restrictions have largely disappeared. Secondly, there have been tectonic shifts in the world economy with sustained high economic growth rates in emerging markets making them much more important both as markets and as sources of competition. Thirdly, countries have fewer incentives to close their markets as the world has become more interdependent with global supply chains. Government support to domestic firms is taking new forms, as countries rely less on tariffs and non-tariff measures (NTMs) and prefer trade defense instruments instead. Fourthly, over the past decade there has been a global proliferation of PTAs and these increasingly cover areas of 'deep' integration such as services, government procurement, and provisions on minimum environmental and labor standards. It is therefore worthwhile to examine Turkey's trade policy, with a view to understand the potential impact on its trade competitiveness.

81. International agreements should be considered along with "flexibilities", which are generally used to circumvent a country's commitments in its trade agreements. Flexibilities in this context refer to the many formal and informal means by which countries knowingly raise trade barriers above their commitments, even if such policy changes are intended to be temporary. Many countries, especially some of the major emerging economies, are exercising flexibility through temporary trade barriers, such as antidumping, safeguards, and countervailing duties on a large scale and with high frequency (Bown, 2011, 2013). The scale and frequency of import restrictions have the potential to severely distort trade flows and resource allocation, hampering productivity and competitiveness.

Turkey's use of temporary trade barriers

82. By the 2009 global crisis, Turkey had developed a relatively liberal trade regime. The set of standard indicators presented in Table 8 are revealing. In 2007, Turkey's trade-weighted applied tariff on manufacturing products was only 1 percent, and its simple average applied most favored nation (MFN) tariff was only 4.8 percent. More comprehensive and economically meaningful indicators such as the trade tariff restrictiveness index (TTRI) or the overall trade restrictiveness index (OTRI) were also quite low for Turkey during this period.

83. Turkey has made substantial trade policy commitments outside of the World Trade Organization (WTO) system through its Customs Union with the EU. Turkey's MFN applied rate and the share of imported products subject to tariff lines are below those allowed under its WTO commitments. However, following the establishment of the Customs Union between Turkey and the EU, overall tariff rates declined significantly. First, two-way trade between Turkey and the EU is effectively duty free. Second, Turkey has sequentially adopted many of the other FTAs that the EU has negotiated with third countries, thus also extending preferential tariff access to these trading partners. Combined, nearly half of Turkey's overall exports are to countries with which Turkey has signed an FTA or is in a customs union, referred jointly as PTAs. This implies that the trade policy indicators that take into account Turkey's tariff preferences will reveal Turkey as being even more open than the indicators of its MFN policies in isolation, given that so much of its trade is with PTA partners.

Table 8: Turkey and EU import policy indicators, 2007

(In percent)

Turkey	All products	Manufacturing products	Agricultural products
Tariff binding product coverage	50.4	42.8	--
Simple average tariff binding	28.3	16.9	60.1
Simple average MFN applied tariff	10.0	4.8	46.7
Trade-weighted applied tariff (including preferences)	1.8	1.0	17.6
TTRI	1.3	--	--
OTRI	3.8	--	--
EU			
Tariff binding product coverage	100.0	100.0	--
Simple average tariff binding	5.4	3.9	15.1
Simple average MFN applied tariff	5.2	3.8	15.0
Trade-weighted applied tariff (including preferences)	3.0	2.4	11.8
TTRI	5.1	--	--
OTRI	6.4	--	--

Sources: WTO (2008, 2009) and World Bank (2008).

84. In line with the large scale and frequent use of trade policy flexibilities by many countries, Turkey is also exercising flexibility through temporary trade barriers. Applications of these flexibilities have led to deviations from a truly common external tariff (toward PTA non-members) otherwise specified by the customs union with the EU. In particular, Turkey has even exercised flexibility by changing some of its applied trade policies toward PTA partners. More formal flexibilities include Turkey's increasing use of TTBs.

85. A significant share of Turkey's imports is affected by trade barriers. Turkey has accessed various institutional "exceptions" during 2008-11 to implement new trade barriers. Recent increases to applied tariffs in the textiles and steel industry alone may affect up to 9 percent of Turkey's manufacturing imports. Data from the World Bank's Temporary Trade Barriers Database indicate Turkey's antidumping and safeguards in effect by 2011 impact another 4.4 percent of Turkey's imports. Overall, Turkey had 127 antidumping measures, 10 safeguard measures and 1 countervailing measure in effect at the end of 2011. While implementing new import restrictions through the "exceptions" permitted by the WTO and PTAs may be in line with international rules, the economic impact weakens in part the effectiveness of Turkey's relatively low applied import tariffs.

86. The list of major import products that Turkey covers with TTBs presents some cause for concern regarding Turkey's industrial competitiveness. Turkey applies TTBs to import products in a number of different industrial sectors, including sizeable shares of imports in textiles and apparel, metals, electrical machinery, plastics and rubber, and stone and glass (Karacaovali, 2011). Table 9 presents a ranking of Turkey's "top 10" TTBs in effect in 2011 by the estimated size of impacted imports.[33] While the list does contain examples of TTBs applied to end-consumer products (e.g., footwear; travel goods, handbags and similar containers; made-up textiles) most of these major TTBs are applied to key industrial inputs. Important examples include multiple TTBs involving cotton or synthetic yarn or fibers, and industrial chemicals and plastics (MEG, PVC, and PET). New import restrictions on inputs impose higher costs on domestic downstream industries in Turkey and work to decrease their competitiveness. It negatively affects the ability of Turkish firms to compete in both the domestic market against imports from other foreign competitors and in third markets as exporters.

33 These are upper bounds to the true amount of impacted trade given that this is based on bilateral import data at the 6-digit Harmonized System level and TTBs are frequently applied at a much more disaggregated level. Furthermore, while the approach takes care to base the estimates on bilateral data and application of policy, it does not adjust for the possibility that trade diversion from non-targeted sources may replace bilateral imports destroyed because of the imposed TTB.

Table 9: Turkey's Top 10 TTBs in Effect in 2011, by estimated import value

	TTB Policy and Imported Product	Year of initiation (imposition)	Initial year of expected removal	Imports (millions of current US$)
1.	Global safeguard on footwear	2006 (2006)	2009 (extended to 2012)	561
2.	Global safeguard on cotton yarn	2008 (2008)	2011	435
3.	Antidumping on polyvinyl chloride (PVC) from the EU	2001 (2003)	2008	376
4.	Global safeguard on polyethylene terephthalate (PET)	2011 (2011)	2014	284
5.	Global safeguard on travel goods, handbags and similar containers	2007 (2008)	2011 (extended to 2014)	247
6.	Antidumping on PVC from US	2001 (2003)	2008	202
7.	Antidumping on yarn of man-made or synthetic or artificial staple fibers from India	2008 (2009)	2014	149
8.	Antidumping on certain made-up textile articles and fabrics made of artificial or synthetics fibers from China	2009 (2010)	2015	118
9.	Antidumping on mono ethylene glycol (MEG) from Kuwait	2008 (2010)	2015	110
10.	Antidumping on polyester textured yarn from China	2007 (2008)	2013	93

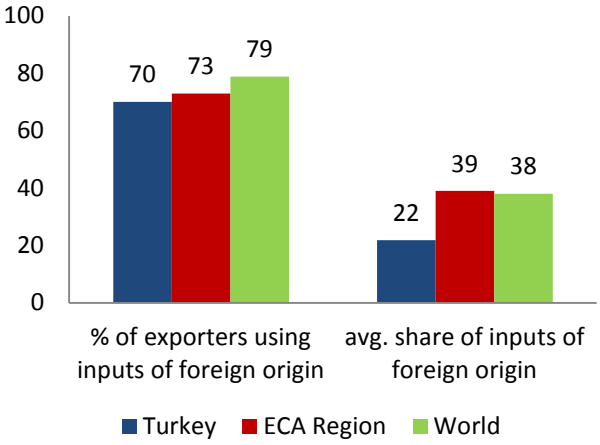
Sources: Data on antidumping, safeguards, and TTBs constructed by the author from Bown (2012) and matched to HS06 import data in UN COMTRADE from WITS, based on methodology of Bown (2011a). Based on information available as of March 20, 2012.

87. The potential impediment to competitiveness comes also through "cascading contingent protection". The pattern of products and industries listed in Table 9 also creates a concern that downstream competitiveness may suffer substantially and result in a tide of "cascading contingent protection" that can take place if policymakers impose new import restrictions early in the value chain (Hoekman and Leidy, 1992). For example, Turkey's import restrictions on petrochemicals and plastics may make it more costly for Turkish firms to produce man-made fibers (that require such products as inputs), thus making these firms less competitive. These firms' newfound loss of competitiveness with respect to imported fibers then spurs their demand for new import restrictions on fibers. But imposing new import restrictions on fibers makes it more costly for Turkish firms further downstream that produce textiles and apparel, making these firms less competitive as well. Their loss of competitiveness with respect to imported textiles and apparel then spurs their demand for new restrictions on imports of textiles and apparel – i.e., the increases in applied MFN and PTA tariffs referred to earlier in this Chapter. The implication is that imposing new import restrictions at the beginning of the value chain can ultimately put at risk the international competitiveness of an entire downstream industry. This can also affect the pattern and even the net level of FDI, if foreign firms choose against investing in Turkey (where access to key industrial inputs is too costly due to TTBs) in favor of other markets. The potential negative impact on competitiveness of import restriction measures is likely to be limited for exporters that import most of their intermediate goods directly. In this case, the exporters are eligible for a duty draw back and are exempt from trade remedies such as anti-dumping, anti-subsidy and safeguard measures in the context of the inward processing regime.[34] Still, the administrative cost of this practice is expected to be a burden on competitiveness of these exporting firms.

34 Another mitigating factor is the practices of the Board of Evaluation of Unfair Competition in Imports and The Board of Evaluation of Safeguards, which take into account both consumer interests and international competitiveness of Turkish exporters as well as downstream and upstream sectors, in safeguard proceedings.

88. Cascading contingent protection complicates the policy removal process. Such protection results in complex coordination issues that reduce the incentives and ability for Turkey's policymakers to remove TTBs. TTBs currently covering many downstream and upstream segments of the value chain for a particular industry (e.g. from petrochemicals to synthetic fibers and yarns to textiles and apparel) may require a coordinated removal of the trade barriers to best neutralize the overall impact to firms throughout the industry. For example, a Turkish firm may be more willing to have a tariff on a competing foreign firm's output removed if that would be offset by the removal of a different import tariff on that Turkish firm's inputs. However, Turkey's current institutional system assesses removal of each product's TTB as an independent policy decision without consideration of the spillover through input-output linkages.

Figure 34: Use of imported inputs by exporters



Source: World Bank ESs.

89. While the persistently high import content of exports is perceived to be a problem, Turkey's exporters actually make relatively limited use of imported inputs (Figure 34). The relatively low reliance on imported content is partly a function of having a large, diversified industrial base in the country. On the other hand, access to high quality and low cost imported inputs is still critical for many exporting sectors in Turkey. In the apparel sector, despite the existence of a strong textiles industry in Turkey, access to low cost fabric from China and India is critical for many manufacturers, and those that operate within GVCs require the flexibility to source inputs globally. In the food sector, lack of adequate scale and quality from domestic value chains is often a major constraint for processors, who become reliant on imported supplies, which often face significant import duties. The automotive and machinery sectors require access to high quality, technologically-advanced components that are often not yet available in the domestic market. The government is aware of these problems and is currently conducting sector-specific studies aiming at establishing market-based policies to address structural deficiencies and encourage the supply and use of high-quality domestic inputs.

90. As a result, avoiding policies that may create disincentives to invest in quality inputs may pay off. Exporters clearly benefit from accessing high quality imported inputs. While policies to promote local content may have important objectives, they may create a disincentive for firms to source quality inputs if not designed and implemented effectively. This, in turn, could undermine exporters' competitiveness, reduce exports and ultimately worsen the trade balance. It is therefore important to maintain the cautious approach the government has used when dealing with these incentives is important. Instead of using direct incentives to promote local supply chains, public expenditure could be focused on building scale and quality across key value chains.

Barriers faced by Turkish exporters

91. Overall, Turkey's exports do not seem to face significant TTB barriers abroad. Antidumping and other TTBs are currently not major causes of concern for Turkey's exporters. Only roughly 0.1 percent of Turkey's exports have been the subject to these forms of barriers since the 1990s, albeit most recently at a higher level of 1 percent of exports in 2012.

92. However, exports of certain products to certain destinations may face significant barriers. This was noted in particular with respect to apparel and food exports to some countries in MENA, and automotive exports to Latin America. Table 10 presents the average tariffs faced by Turkish exporters in the country's top destination markets.

Table 10: Tariffs faced by Turkish exporters in key export products – selected partner markets

(In percent)

Rank in exports to EU	HS-4	Description	Share of exports outside EU	World simple avg. tariff	Simple average tariff (%) faced by Turkish exporters to…				
					World	EU	Russia	China	Syria
1	7810	Passenger motor cars, for transport of pass.& goods	17%	15.1	8.7	0.0	0.0	25.0	31.6
2	7821	Motor vehicles for transport of goods/materials	8%	9.5	8.3	0.0	23.1		18.1
3	8462	Undergarments, knitted of cotton	10%	13.6	12.3	0.0	0.0	15.0	
4	7849	Other parts & accessories of motor vehicles	15%	7.3	6.9	0.0	2.0	9.9	11.3
5	8459	Other outer garments & clothing, knitted	13%	13.0	12.1	0.0	0.0	16.9	
6	8439	Other outer garments of textile fabrics	16%	12.9	11.9	0.0	0.0	16.1	
7	7731	Insulated, elect. wire, cable, bars, strip and the like	11%	7.9	9.1	0.0	12.4	7.9	5.5
8	8451	Jerseys, pull-overs, twinsets, cardigans, knitted	15%	12.9	13.6	0.0	0.0	14.3	
9	7139	Parts of int. comb. piston engines of 713.2-/3-/8-	14%	5.5	4.9	0.0	2.5	4.3	17.5
10	6584	Bed linen, table linen, toilet & kitchen linen etc.	23%	13.3	11.9	0.0	0.0	14.6	
15	577	Edible nuts(excl. nuts used for the extract. of oil)	22%	9.2	6.5	2.7	2.5	17.5	15.7
16	589	Fruit otherwise prepared or preserved, n.e.s.	14%	12.7	9.4	0.0	10.9	16.1	0.0

Source: Trade Analysis and Information System (via WITS).

93. Of particular concern to exporters is the perception of the uneven playing field in third markets. Specifically, Turkish exporters complain that they do not get automatic access to the FTAs between the EU and third countries, leaving them at a disadvantage relative to EU exporters.[35] Companies cited this issue as a major barrier to automotive exports to some Latin American countries. Second, this uneven playing field may cause trade deflection that risks the imposition of origin controls that could undermine the benefits of the Customs Union between Turkey and the EU. For example, for imports of cars from Mexico, Turkey has introduced a protection measure based on rules of origin (ROO) to reduce trade deflection. But the use of such measures, especially if they were to proliferate, undermines one of the key advantages of the CU: the elimination of costly origin requirements. Finally, a topic that is a potentially bigger cause for concern for exporters in this area is the erosion of preferences in the EU market that inevitably result from the signing of new FTAs. In this regard, the trade agreements with countries like Mexico, South Africa, Korea, and India leave Turkish exporters facing formidable new competition in the EU in key sectors such as automotive, machinery, and textiles. On top of the tariff restrictions, Turkish exporters face a range of non-tariff barriers in accessing new markets, particularly with those related to standards. Standards and market access seem to be an important issue in the food industry. Standards and restrictive legislation in importing countries impose the need for investment to comply, but quotas and other import restrictions to the same countries limit the ability of firms to reach the critical mass of exports to cover the costs for investment.

35 A fortcoming study on the Evaluation of Customs Union with the EU looks into the economic impact of this problem.

CONCLUSIONS

94. Turkey has benefited from the diversification of its export markets, but the EU will remain a key trading and investment partner for Turkey. The EU is important for two reasons:

- *The sheer size of the EU market.* In 2010, German imports were higher than the imports of all MENA countries; and,
- *Spillovers from trade and investment links with the EU.* Exporting to the EU has a productivity-enhancing effect for Turkish exporters and the expansion into MENA has been mostly the result of exporters with experience in EU markets extending their reach. At the same time, the firm-level analysis shows that higher unit values and higher value added are positively associated with imports of intermediates and with foreign ownership. EU production networks will thus remain critical to further upgrading the quality of Turkey's export basket.

95. Export growth at the extensive margin is closely associated with the move into higher value products. New firms and firms producing new products report higher than median unit values and over time show higher survival rates. Nurturing more entry and thus less reliance on established firms and established products is thus closely associated with upgrading the quality of the export basket.

96. Trade policy may play a role for boosting export competitiveness. While Turkey is not an outlier in its use of "trade flexibilities", the large scale and frequent use of these policies seem to impact a significant share of Turkey's imports. The analysis in the chapter showed high quality imported inputs and foreign ownership enhance export quality. As a result, it will be crucial to promote local production effectively without creating disincentives for firms to source quality inputs that in turn could undermine export performance. Policies aimed at building scale and quality across key value chains, rather than using direct incentives, are likely to have higher and more sustainable impact. The next chapter looks into the role of GVCs in detail.

4. Global Value Chains

INTRODUCTION

97. The fall in transport costs and the rise of the digital economy has led firms to adopt increasingly complex sourcing strategies, in which the production of a final product is sliced up into different stages and tasks that may be distributed across the globe. In this highly flexible and dynamic context, firms' location decisions are becoming more task-specific, and less sector-specific, providing both opportunities and challenges to countries that seek to integrate into the global economy. Production chains have become longer and more complex, linking a larger number of locations in the course of the past twenty years. Fostering economic upgrading within production chains require policies focusing on endowments such as capital, technology and knowledge.

98. Currently, many Turkish firms seem to specialize in assembly and low value-added segments of GVCs. Although Turkey's participation in GVCs, or the degree of its global integration, is comparable with other middle income countries, its specialization is prominently in the center of the value-chain—standardized labor intensive manufacturing. Notable exceptions to this pattern exist, however, particularly in the apparel sector.

99. To realize its ambitious export targets, Turkey will need to upgrade along the value chain. There are three main factors that make Turkey well-positioned for this upgrade. First, it has strong presence in economic activities with longer than average value chains. Second, its trade costs are low. Finally, its logistics infrastructure is performing well. Furthermore, upgrading along the value chain also has the potential to have positive spillovers to the rest of the economy.

100. This chapter starts by presenting the conceptual framework for analyzing the global value chains. The chapter then discusses Turkey's participation in GVCs. In order to gain better insight into Turkey's position in GVCs the chapter includes an analysis of three selected sectors; motor vehicles, textiles and apparel and agri-food. Finally, the chapter ends with a discussion of the determinants of the spillovers from GVCs, in terms of enhanced productivity for domestic firms.

CONCEPTUAL FRAMEWORK

101. GVCs have changed the shape of international trade, creating increasing competition and co-dependency between countries. While countries compete to attract jobs and investment, they increasingly depend on each other's demand, capital and production. With the dramatic growth of outsourcing practices, i.e. the practice to subcontract non-core activities to independent suppliers, competition between companies has shifted from being horizontal, i.e. firms compete in the same sector for the same customer-base, to being vertical, i.e. firms in the same value chain compete to perform specific and specialized tasks, or steps in the manufacturing process. Firms are at the same time competitors and sources of key inputs and competences to each other. Hence, lead firms may compete on specific tasks with their own first-tier and lower-tier suppliers while the latter may evolve from a supplier role to a lead firm role. The extent of vertical competition varies depending on the nature of power relations within the specific value chain.

102. In an attempt to improve the performance in any or all aspects of their product-cycles, firms choose different combination of in-house production, offshoring and outsourcing strategies. The motives for offshoring and outsourcing for the strategic firm range from the pursuit of greater flexibility (both outsourcing and offshoring), the diversification of location (offshoring), the reduction of corporate risk and the operation in a more nimble business environment (outsourcing), to the lowering of production costs (mainly offshoring). All of these goals can support company profitability, lower production costs, and allow for increased shareholder

value.[36] Hence, firms will seek to use the most competitive inputs in each segment of the value chain and the most efficient way to organize and combine the various inputs. Moreover, the structure and organization of production evolves continuously in adaptation to a rapidly evolving global economy. Under the pressure of shifts in demand, firms leverage on technological advances, managerial innovation and heterogeneity in socio-economic systems in order to adapt.

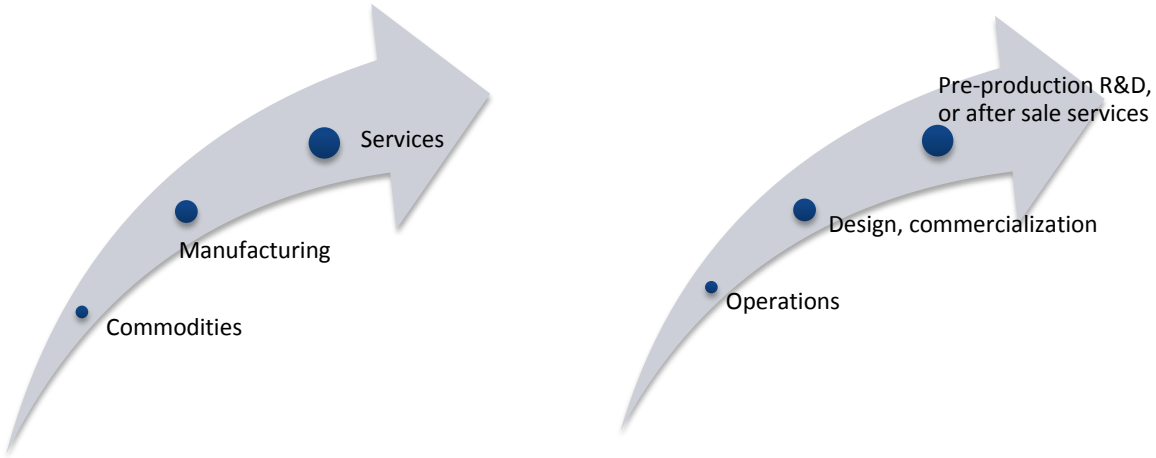
103. Firms' location decisions are becoming more "task-specific" and less "sector-specific". Within a GVC, countries tend to specialize in different stages of production. This is reminiscent of the division of operations "all performed by distinct hands" envisioned by Adam Smith in 1776.[37] The phenomenon has been called vertical specialization by Balassa and Findlay, slicing up of the value chain by Krugman, and given many other names by other economists, including fragmentation, production sharing, global production networks, or trade in tasks. It identifies a production structure where tasks and business functions can be performed by independent companies globally or regionally dispersed. "Tasks" rather than sectors define the specialization of countries in the value chains.[38]

104. These considerations suggest that – as firms' location decisions are task specific – countries should adapt their strategies as well. The objective is not to develop domestic industries that would capture all the segments of production along the whole value chain. It is to identify the country's best position in GVCs and the most competitive supply of tasks or business functions. This means moving away from paradigms where development means evolving in terms of sectors and focusing, instead, on economic upgrading through moving-up the value chain, i.e. moving to more sophisticated tasks. Figure 35, exemplifies the difference between the two paradigms. At the same time, while it is more feasible to specialize in one or few tasks than in the entire range of activities needed to make a product, many countries succeeded in moving up the sophistication gradient in tasks, just as in products. [39]

Figure 35: From sectors to tasks-based development strategies

Old paradigm: from low to high value-added sectors

New paradigm: from low to high value-added activities within sectors



Source: Cattaneo and Miroudot (2012).

36 Milberg and Winkler, forthcoming

37 Costinot, Vogel and Wang (2012)

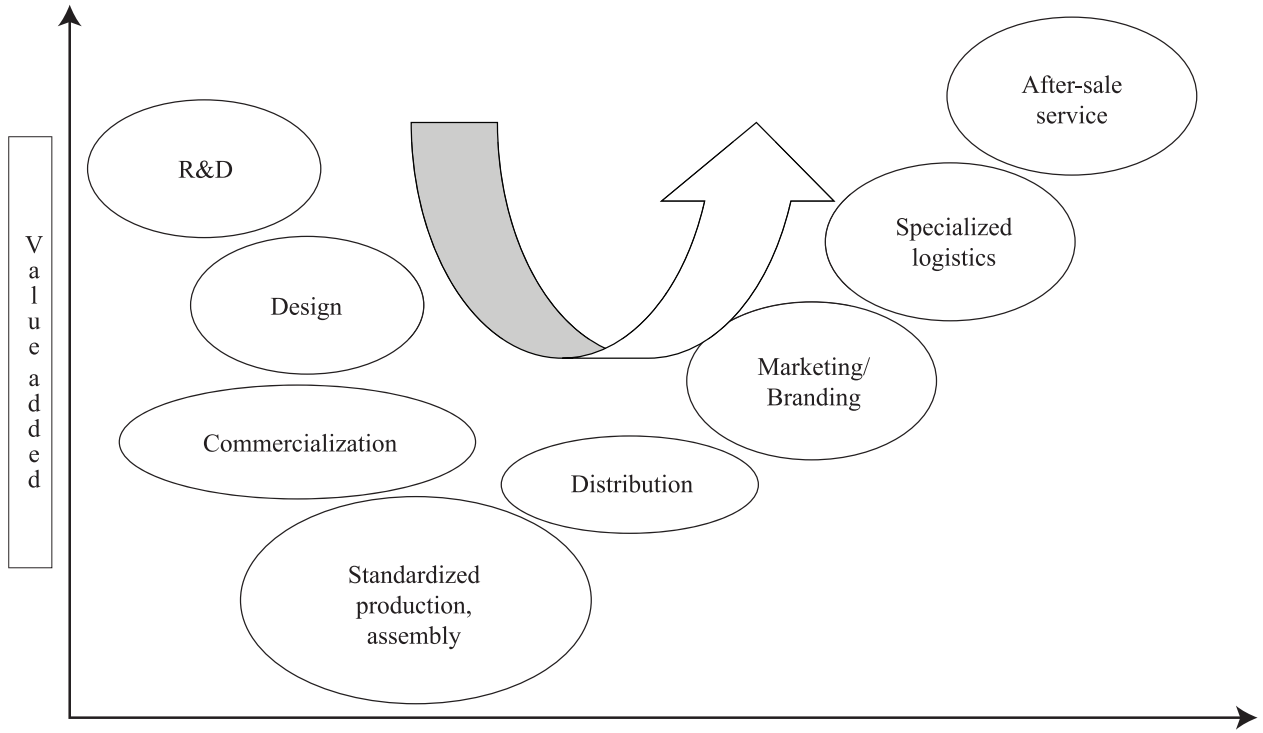
38 Grossman and Rossi-Hansberg, 2008

39 United Nations Industrial Development Organization (UNIDO), "Breaking-in and moving-up: New industrial challenges for the bottom billion and the middle-income countries", 2009.

105. There are four distinct types of economic upgrading. These are process upgrading, product upgrading, functional upgrading and intersectoral (or chain) upgrading.[40] Process upgrading is productivity growth in existing activities in the value chain. Product upgrading is the move into higher value added products within the same value chain. Most case study work has been on functional upgrading, defined as the move into more technologically sophisticated or more integrated aspects of a given production process. Finally, intersectoral upgrading refers to moving into new, higher value added supply chains.[41]

106. This report emphasizes the importance of functional upgrading and development: that is, moving into higher value added activities within the value chain. From the point of view of the firms, this can be done in two ways: seeking upgrading opportunities (within or across activities) or by consolidating and bundling tasks within the value chain. In many chains, the value added lies with the intangible activities or services.[42] An efficient manufacturing sector requires efficient and competitive services as well as a skilled workforce and continuous innovation in products, processes and business models. Services such as financial intermediation, R&D, logistics, and marketing are necessary to produce value added manufactures (Section 5 discusses the competitiveness of the Turkish services sector). Services tasks tend to be located either at the beginning (pre-production activities such as basic and applied R&D, design, commercialization) or at the end (post-production activities driven by marketing knowledge, such as marketing, advertising and brand management, specialized logistics and after-sale services) of the value chain. Mudabi (2008) has built on this fact to highlight that value creation in value chains usually takes a U (smiley) shape, with the value created at the extremes of the smile, i.e. in pre-production or in post-production (Figure 36). At the center of the value chain – where manufacturing and standardized services take place – there is – according to Mudabi – little knowledge creation compared to the extremes. However, anecdotal and first empirical evidence seems to suggest that this curve, which describes very well the electronics sector, may have a weaker explanatory power for other types of value chains.

Figure 36: U-shaped Value Chain (Smiley)



Source: Adapted from Mudabi (2008)

40 Humphrey (2004) and Humphrey and Schmitz (2002)

41 Milberg and Winkler, forthcoming

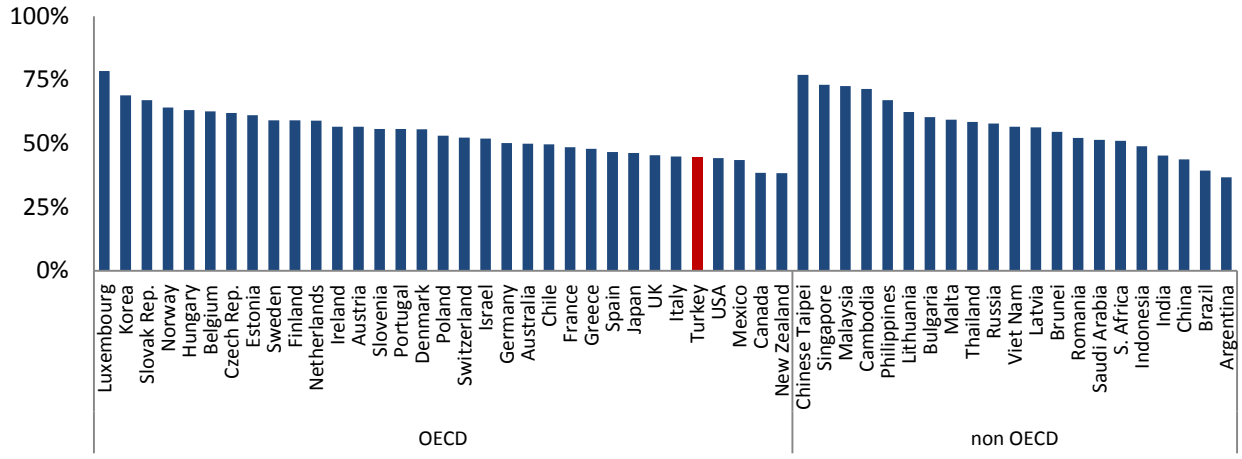
42 Frederik (2010)

107. Fostering economic upgrading requires policies focusing on endowments such as capital, technology and knowledge. Good connectivity, competitive infrastructure in transport, energy, water and telecommunications, a favorable environment for FDI (e.g. through the establishment of a good framework for PPPs and an investor-friendly business climate more broadly), energy policies that aim at reducing the unit costs of energy production and consumption (such as the smart grid and the shale gas revolution in the US), and an efficient business services sector are other important drivers of upgrading.

TURKEY'S PARTICIPATION IN GLOBAL VALUE CHAINS – AN OVERVIEW

108. Turkey's participation in GVCs is comparable with other middle income countries. The participation index[43] measures the foreign value added embodied in domestic gross exports and the domestic value added embodied in third countries gross exports. The higher the foreign value added embodied in gross exports and the higher the value of inputs exported to third countries and used in their exports, the higher the participation of a given country in the value chain. The OECD (2012) has computed this indicator for OECD countries and selected non-OECD countries (Figure 37). It finds that Turkey's participation rate is just below 50 percent. Country size – in particular relative to regional peers – appears to matter. Both in advanced and emerging economies, smaller countries such as the Czech Republic, Singapore, Estonia, the Slovak Republic and Chinese Taipei post participation rates between 60 percent and 80 percent. By contrast larger countries have a lower participation index. The participation rate of Turkey is about the same as the one of India, Italy, the UK and Japan. It is higher than the participation of comparable middle-sized emerging countries such as Mexico, Brazil and Argentina, and also slightly higher than that of China. The relatively low index for China – below the value for Japan and Germany and at the same level as the USA – might seem somewhat surprising. This reflects both a lower Chinese value added in third countries' exports and a lower foreign value added in China's gross exports as commonly perceived.

Figure 37: GVC participation index in OECD countries and selected non-OECD economies, 2008



Source: OECD (2012).

109. Turkey specializes in the "center", i.e. in standardized labor-intensive segments of the value chain. What is more important than the degree of integration is "where" in general a country is located in the value chain. A country can be concentrating its participation in GVCs in upstream activities, at the center of the value chain, or in downstream components, depending on its specialization. Countries specializing in upstream activities (Figure 36) produce the raw material or the intangibles involved at the beginning of the production process (e.g. research and design). Countries downstream do the assembly of the final products or specialize in customer services. Finally, countries involved in activities at the center of the value chain focus on standardized labor intensive manufacturing jobs. Turkey falls into this third category of countries.

43 Koopman et al., 2011

110. Turkey is a preferred destination for final assembly platforms. Other countries in this same category are the Dominican Republic, Honduras and Mexico in the Americas; Germany, Hungary, Slovakia, Slovenia and Tunisia in the European and Mediterranean region; China, Cambodia, Thailand and Vietnam in Asia (Van Aasche, 2012). This is consistent with the findings from similar studies using alternative methodologies. Taymaz et al. (2011), dividing the production process of traded goods into five different categories according to UN Broad Economic Category (primary goods; intermediate inputs, semi-finished products, intermediate inputs, parts and accessories; and consumption goods), find that Turkey specializes in downstream labor intensive segments of the value chain. Turkey exports mostly consumption goods and semi-finished products as intermediate inputs and imports semi-finished products, capital goods and primary goods. It specializes in sectors and production processes that are labor intensive. These patterns are fully consistent with a country specializing in assembly intensive activities. Since the participation of Turkish companies in GVCs is focused mainly on assembly activities, "functional upgrading," as described above is important for moving to higher value added activities. Turkey has managed successful functional upgrading in the textiles sector and this experience could be replicated to other sectors.

111. One of Turkey's advantages as a source country for production facilities is its good connectivity, particularly with European markets, while trade costs for distant markets remain higher. Differences in size and endowments of national economies are not the only explanation for differences in the volume of trade and in its complexity, in terms of export participation and diversification of trade patterns. Distance and supply-side constraints and inefficiencies play a large role. Bilateral trade costs between countries capture the price equivalent of the reduction of international trade as compared with the potential implied by domestic production in the origin country and consumption in the destination markets (Anderson 2002, Novy 2009).[44] Higher bilateral trade costs result in smaller bilateral trade flows.

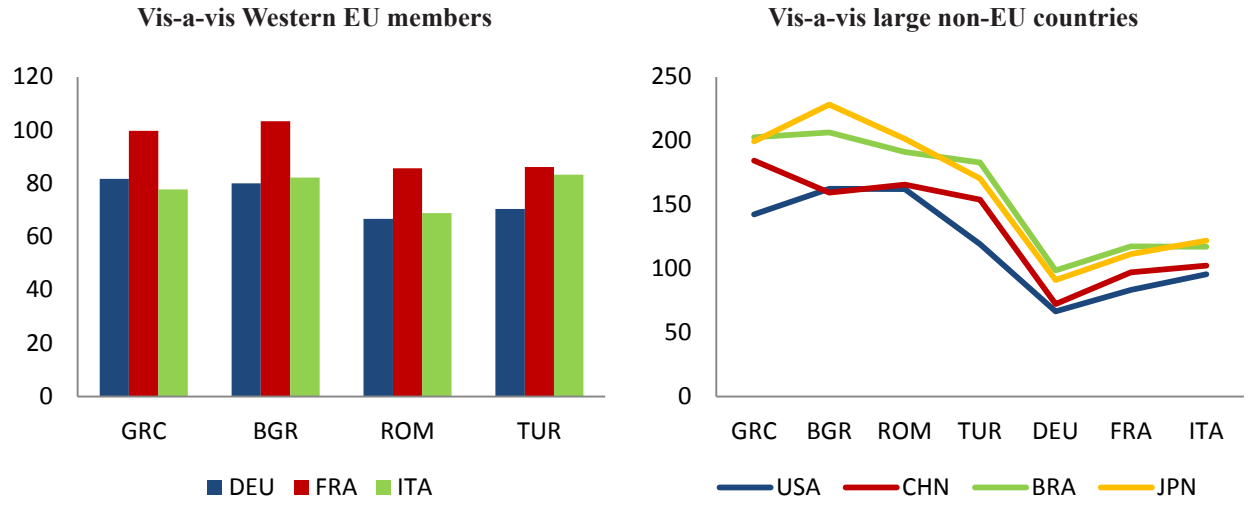
112. Turkey has relatively favorable (low) trade costs when compared to competitors in the region (Figure 38, left-hand side panel). Trade costs vis-à-vis EU markets are lower for Turkey – in particular with France and Germany - although Turkey has a larger geographical distance to these countries than Romania, Bulgaria or Greece and is economically less integrated with them. With respect to Italy on the other hand, Greece, Bulgaria and Turkey have about the same level of bilateral trade costs. With distant markets, such as the US, China, Brazil or Japan, Turkey does unequivocally better than Greece or other Black Sea countries (Figure 38, right-hand side panel). Compared to the larger members of the EU (Germany, Italy and France), however, Turkey's trade costs are almost twice as high. These differences are important if Turkey wants to upgrade its position in value chains, as doing so means increasingly competing with them.

113. Low trade costs are reflected in Turkey's relatively good logistics performance. The performance of international supply chains is measured using the Logistics Performance Index (LPI). It is based on the assessment of logistics professionals located in the country's major trading partners, and is a weighted average of six components that are critical for logistics performance.[45] Turkey compares well with its neighbors and current competitors in logistics performance (Figure 39). It is 27th in global rankings, just below China and above Portugal, which occupy the 26th and 28th position respectively. The comparison is even more favorable when the LPI is adjusted for the level of development as measured by the gross national income per capita; Turkey performs better than countries with similar per capita income (Figure 40). The good logistics performance of Turkey is an indication that connectivity and supply chain related reforms and improvements have been successful. These two parameters are those in which the country has advanced most over the last four-five years.

44 The recently published World Bank- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) dataset (Arvis et al. 2013) proposes comprehensive measures of trade costs for 178 countries over the 1995-2010 period using the inverse gravity methodology due to Novy (2013).

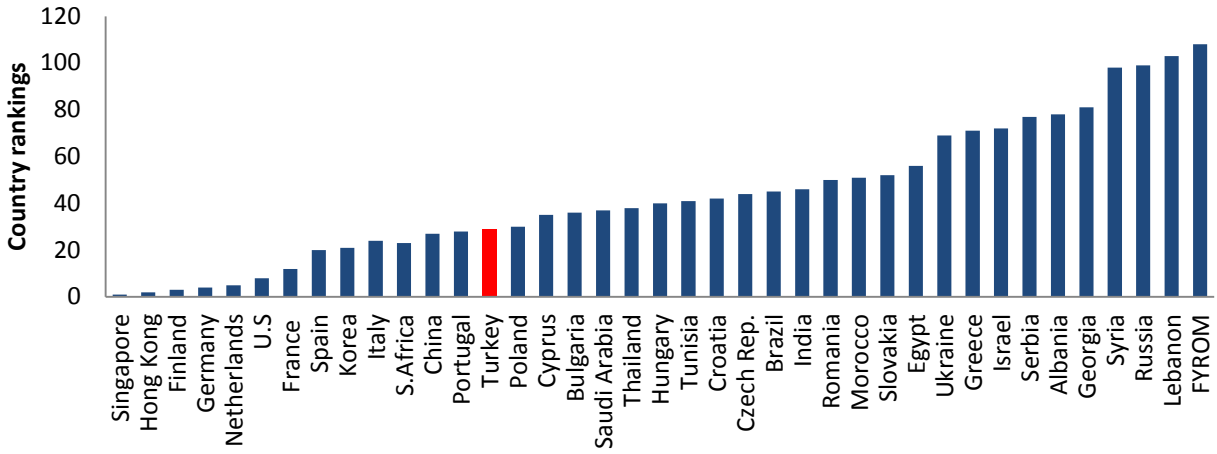
45 Efficiency of the customs (border) clearance process; quality of trade and transport-related infrastructure; competence and quality of logistics services; ease of arranging competitively priced international shipments; ability to track and trace consignments; and timeliness and frequency with which shipments reach the consignee within the scheduled or expected time.

Figure 38: Bilateral trade costs for Turkey and comparator countries (ad valorem equivalent)



Source: Trade Costs Database, World Bank (data for Greece is 2008).

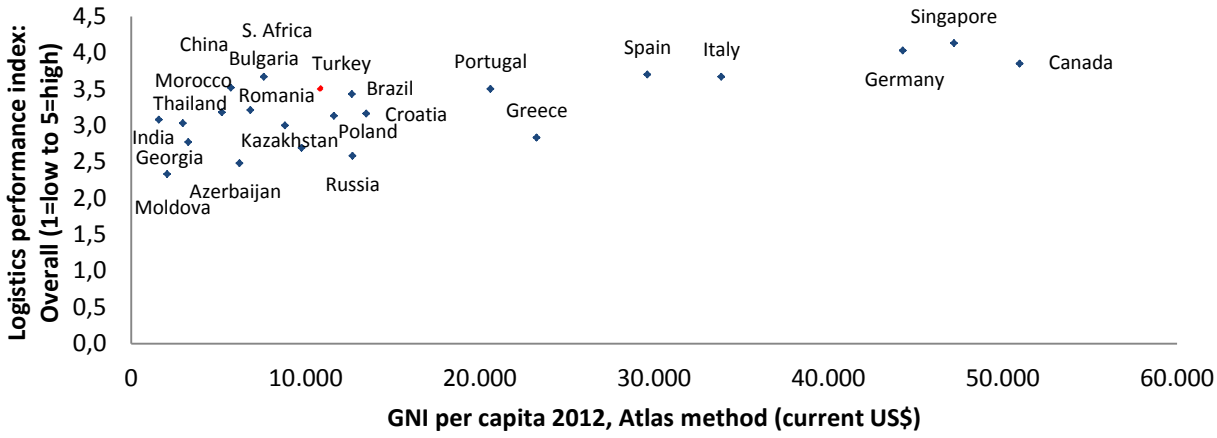
Figure 39: Turkey ranks high in logistics compared to its neighbors ... (LPI ranking, 2012)



Source: LPI 2012.

Note: A smaller number indicates better performance.

Figure 40: ...And performs better than countries with a similar per capita income



Source: LPI 2012.

114. Turkey specializes in relatively long value chains. Although Turkey currently specializes mostly in activities at the center of the value chain, focusing on standardized labor-intensive manufacturing activities, it specializes in sectors with relatively long value chains (Box 2). This represents greater opportunities for upgrading along the value chain.

115. Moreover, each value chain is different. Each value chain has specific characteristics and dynamics which determine the length of the chain, the distribution of value added, and the geographical reach of the value chain. Turkey's involvement in value chains tends to be mostly at the production/assembly stage and within Europe, but the country managed to capture higher value segments of the textiles and apparel value chains (Box 2).

116. Hence, while the aggregate analysis is useful to describe general trends, it is worthwhile to study in detail selected representative sectors. Here we study motor vehicles, textiles and agrifood. For each sector, the following three sections provide an overview of the functioning of typical value chains and then discuss the position of Turkey. In describing the general features of value chains in the sector, issues such as the complexity of the value chain in the sector and for the products analyzed, the technological accumulation and value added generation and distribution, and the typical geographical dispersion of value chains in such industries (regional vs. global) will be considered. The performance of Turkey is then assessed according to the following parameters: length and internationalization of the value chain in Turkey compared to international peers; stage of value chain in which Turkey specializes; and geographical reach of its exports and imports. In the analysis, the classification by Taymaz et al. (2011) is used, which assigns exports (categorized at the 4-digit ISIC code) to one of five stages of production, namely: final products; main inputs/parts; standard inputs; raw materials; machinery and equipment.[46]

46 See background paper for details and caveats of this classification.

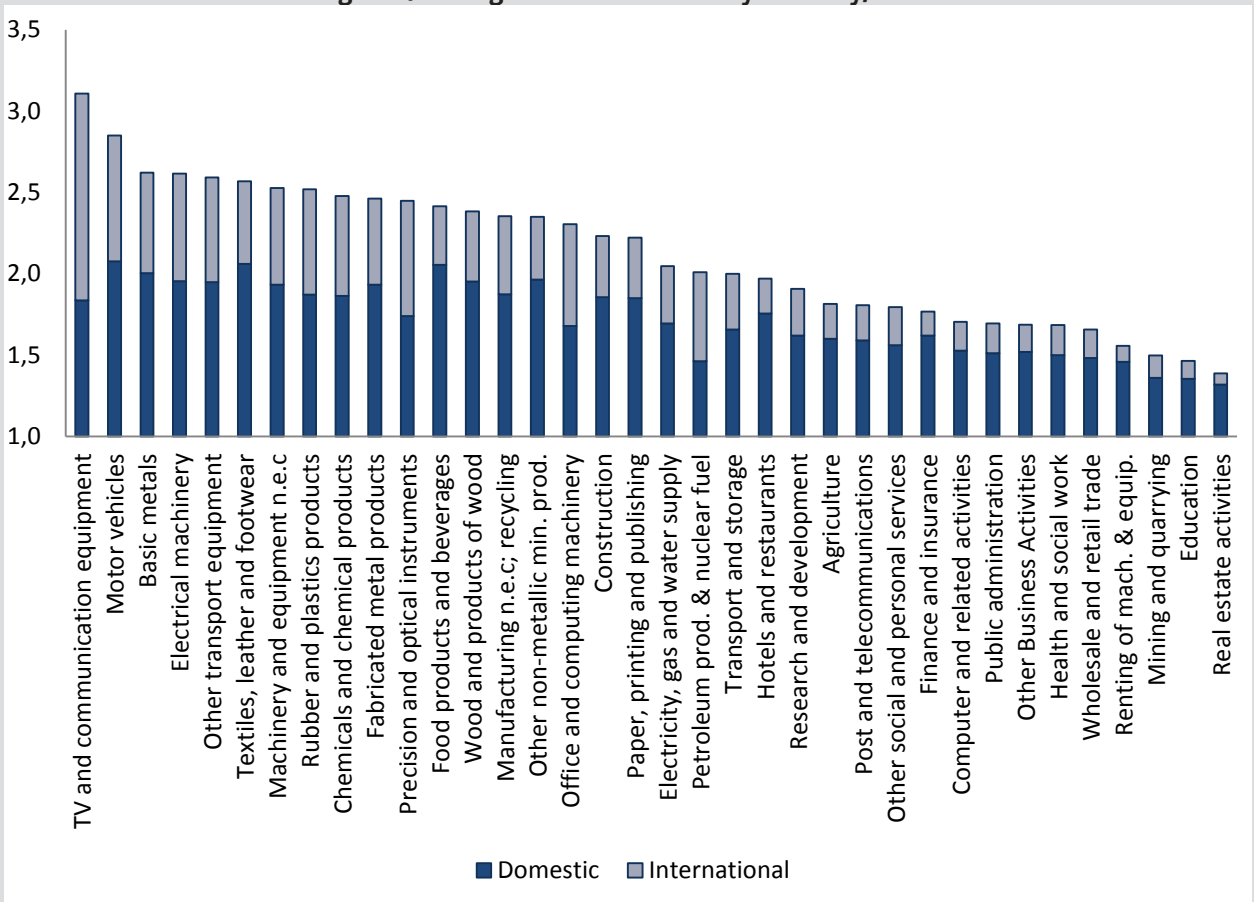
Box 2: Measurement of the length of value chains: The Fally Index

To assess global differences in sectoral value chains, Fally (2011) has proposed an index that measures the length of value chains in different industries. The Fally index takes a value of 1 if there is a single production stage in the manufacturing process (i.e. all production is carried out in one single plant). It increases when inputs from the same industry or other industries are used. It increases according to a weighted average of the length of the production involved in these sectors. This is measured from input-output tables, which allow inferring the number of plants involved sequentially in production (number of 'stages'). In particular Fally computes a measure of the average number of plants involved sequentially weighted by the contribution of each plant to value-added. The index is useful as it provides an assessment of whether countries are involved in simple or complex value chains. While, between 1995 and 2005, on average the length of value chains has increased by 10 percent - and this increase is largely driven by the internationalization of value chains – there is a large variation across industries (Figure 41).

With an index of 3.1, TV and communication equipment is the longest industry on average. It is immediately followed by motor vehicles (index of 2.8). A range of industries have an index of about 2.5. These include important industries for the Turkish economy such as non-electrical machinery and its main input: fabricated metals, textiles, leather and footwear, and food. Services industries have on average shorter value chains. The degree of international fragmentation is also different from industry to industry. TV and communication equipment is the most internationally fragmented, with more than half of the production stages being international.

It is good news for Turkey that key sectors in the Turkish economy all have relatively long value chains. These include TV equipment, motor vehicles, non-electrical machinery, food, and the apparel and textiles sector. Longer value chains offer countries more opportunities for upgrading, and through it changing substantially the structure of their trade and output.

Figure 41: Length of value chains by industry, 2008



Source: OECD.

MOTOR VEHICLES

117. The automotive industry is an excellent example of a complex value chain where most of the valued added is generated at the pre- and post-production phases. Motor vehicles are highly complex machines typically composed of over 20,000 separate parts sourced from several countries. Technological accumulation and value added is generated by the design, building, and operation of complex production systems and products. Hence, the automotive industry fully reflects the "smiley" concept of Mudabi (2008), with high value added activities carried out in the pre- or post- production stages and low value added activities carried out in the production and assembly phase. Typically, pre-production design and marketing activities take place in large developed countries while developing countries participate in value chains in the automotive sector by leveraging on low labor costs, proximity to large consumer markets.

Box 3: Renault-Dacia regional design and development activities in Central and Eastern Europe

In 2007 Renault-Dacia moved part of their regional design and development activities to Central and Eastern Europe. The center in Romania, the Renault Technologie Roumanie (RTR) is the largest Renault engineering center outside France, with approximately 2,500 engineers. While the bulk of RTR activities are located in Romania itself, it also has entities in Slovenia, Russia, Turkey, and Morocco. Each of these additional locations employs some hundreds of engineers and technicians. RTR mainly accommodates engineering functions (conception and testing), along with purchasing, design and support (management, human resources, information technology (IT)). The main fields of activity are designing and improving vehicles and adapting engines and powertrains. With three locations in Romania, RTR brings together all the activities needed in the development on an automotive project. These include (1) engineering offices that develop and adapt vehicle projects to meet regional client's expectations; (2) a design studio; (3) a technical support center to the Dacia plant and to its suppliers; (4) a testing center that performs tests for the vehicles and the mechanical parts developed by the engineering studios.

The relocation of the design and development activities to Romania was driven by the Dacia small car, an 'entry-level' model, and the idea that designing cars in an emerging market would help address better the new consumer markets of East Europe and Asia. The center now controls the development for all 'entry-level' vehicles (about 35 percent of all Renault vehicles worldwide).

Initially, Renault considered also Turkey as a potential location for its design and development activities but decided to shift the bulk of its operations to Romania due to its EU membership and geographical proximity.

Important geographical determinants of design and development activities are the business culture, low wages and an adapted institutional framework. Among the most important determinants in which well-designed government policies and incentives can play a role are:

- A well-developed base of local suppliers, with capable management, that are able to produce high quality part and components.
- A good level of skills and an education system geared to technical knowledge.
- A well-developed local research system, in particular for development rather than pure research.
- Designing and forming deep regional and international agreements.
- Ensuring compatibility of the legal framework with 'Western' standards.
- Treatment of intellectual property rights.
- Building good infrastructure particularly road and rail transport.
- A friendly regime of fiscal incentives

118. The shift of consumer markets toward emerging countries and countries efforts to climb up the value chain led to some high value added content activities to move to lower income countries. For example the Renault-Dacia group moved part of their regional design and development activities to Central and Eastern Europe in 2007. It moved primarily to Romania and Slovenia. Initially, Renault considered Turkey as a potential location for its design and development activities but decided to shift the bulk of its operations to Romania, a decision presumably linked to its EU membership and proximity (Box 3).

119. Larger firms and exports of final products dominate the automotive sector in Turkey. The exports of larger firms with more than 200 employees constitute more than 90 percent of total exports. Furthermore, these large firms mostly specialize in the final stage of production. More than 70 percent of the sector's exports consist of final products of motor vehicles (Table 11). The second most important stage of the Turkish automotive value chain in terms of value of exports is standard input production. Exports of standard inputs account for one-fourth of total exports. Although there is an increase in the share of the main parts and components exports from 2003 to 2010, these exports amounted to less than three percent of total exports in 2010.

Table 11: Motor vehicle exports, share of exports and production (value-added) in different segments of the GVC

2003	Final	Main	Standard	Raw	Machinery	Total
Export share	73.5	0.4	24.8	0.2	1.1	100
Value-added	48.0	2.7	46.9	0.2	2.1	100

2010	Final	Main	Standard	Raw	Machinery	Total
Export share	72.3	2.4	23.9	0.3	1.1	100
Value-added (2009)	38.4	1.1	53.3	0.7	6.5	100

Source: World Bank staff calculations based on data from TurkStat.

120. A somewhat different picture emerges when production measured by value added is considered. As Table 11 shows, standard inputs accounted for a similar share (47 percent) as final goods in 2003. By 2009, exports of standard inputs surpassed that of final goods by more than ten percentage points. Exports of main parts and components displayed the greatest increase, albeit with a declining share in value added. It is also worth noting that the share of machinery exports in terms of value-added contribution increased from 2.1 to 6.5 percent.

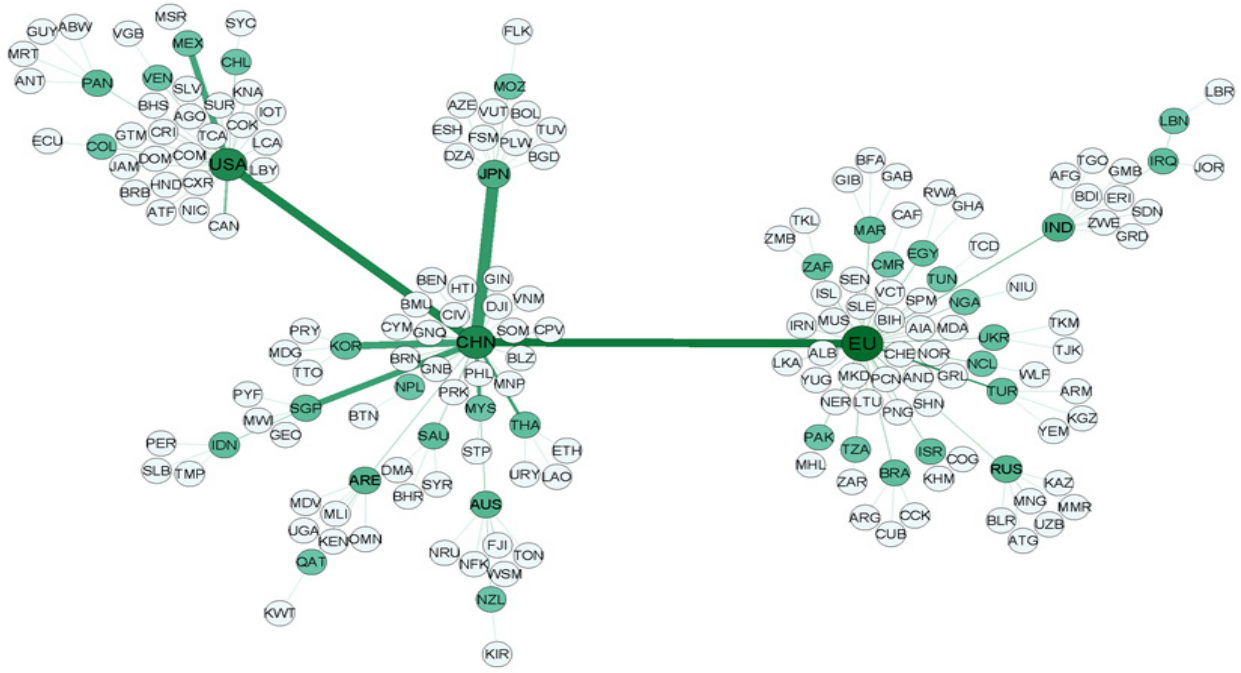
Figure 42: Length of value chains in the motor industry by country, 2008

Source: OECD (2012).

121. With a value chain length index of about 2.5, Turkey's international component of the value chain in the automotive sector makes up about half of the total (Figure 42). It has a large network of domestic suppliers with rich international linkages. This is a feature observed in most European countries, possibly due to the important regional integration of car manufacturing in Europe, the proximity of countries with very different endowments and unit costs for labor and capital and a heterogeneous consumer market. By contrast, countries such as Korea, China, Japan and Brazil portray a strong domestic dominance, which reflects the domestic organization structure of the large conglomerates tied in a large network of domestic suppliers.

122. Indeed, the Turkish automotive sector is strongly oriented toward the EU, both for imports and exports. One of the main features of the automotive value chain is that there is a strong regional bias. Turkey is no exception to these trends. The regional bias is striking both for exports and imports. Starting with exports, 67 percent and 59 percent of assembled vehicles and of parts and components, respectively, go to the EU-15, while 67 percent of motors (main parts) and 41 percent of flat steel (raw material) are destined to the EU-12. Exports of raw materials are indeed the most diversified, with 35 percent and 17 percent going to the ECA countries and the MENA region, respectively. Even more concentration is observed for imports, where the EU-15 absorbs 72 percent of the Turkish import market for finished vehicles, 66 percent of the motors import market, 62 percent of the market for parts and components and 46 percent of the raw materials. Turkey's regional integration in intermediate goods is also evident more generally, beyond the automotive sectors (Figure 43).

Figure 43: World network of intermediate goods (BEC classification, 2010)



Source: COMTRADE.

TEXTILES AND APPAREL

123. The textiles and apparel industry has a buyer-driven supply chain. After the phasing out of the Multifiber Agreement in 2005, the industry has become very competitive due to the low barriers to entry and the low appropriability of technology. Companies that develop and sell brand-name products have benefitted. Unlike producer-driven chains, where value added and profits are generated through greater scale, volume and technological advances, in the buyer-driven apparel and textiles value chain, innovation comes either through new machinery that allow the development of new techniques or from the chemical industry. Accordingly, value added and profits are greater in these upstream sectors. Within textiles itself, value added and profits come from a combination of high-value research, design, sales, marketing, and financial services that allow retailers, designers and marketers to act as strategic brokers in linking overseas factories with traders that cater to product niches in the main consumer markets.[47]

124. The sector is less regionally concentrated than the automotive industry, although Turkish exports are mainly directed to EU-15. Global buyers determine what is to be produced, where, by whom, and at what price. In most cases, these lead firms outsource manufacturing to a global network of contract manufacturers in developing countries that offer the most competitive rates. As a result, the lead firms have considerable control over how much profit accrues at each stage, essentially controlling how basic value-adding activities are distributed along the value chain. Lead firms include brand owners, large department stores, and other retailers typically headquartered in the larger consumer markets: Europe, Japan and US. These firms tend to focus on design, branding, and marketing while outsourcing the rest of the manufacturing process to their global network of suppliers. Given the global reach of textiles and apparel value chains, lead firms have developed private standards and codes of conduct and certify their suppliers according to parameters of delivery, quality, timeliness, labour fairness, and environmental standards (Fernandez-Stark et al., 2012).

125. The sector has a relatively long value chain. The textiles sector has the sixth longest value chain with a value of over 2.5 (Figure 41 in Box 2). Broadly speaking, one can distinguish the following distinct value-adding activities within the textile sector itself: R&D, Design, Purchasing/Sourcing (Inbound), Production/ Assembly/Cut, Make, Trim (CMT), Distribution (Outbound), Marketing and Sales and Services.

Table 12: Textiles, share of exports and value-added in different segments of the GVC

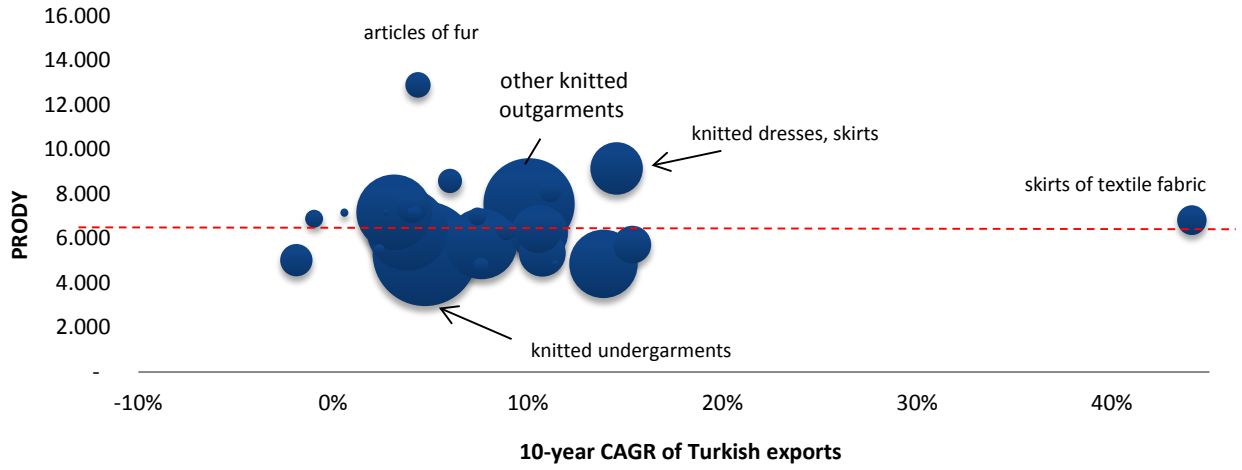
2003	Final	Main	Standard	Raw	Machinery	Total
Export share	78.8	11.9	7.3	1.7	0.3	100.0
Value added	55.5	19.1	13.5	9.2	2.7	100.0

2010	Final	Main	Standard	Raw	Machinery	Total
Export share	70.0	15.0	8.6	5.7	0.7	100.0
Value added	56.0	17.0	13.2	11.8	2.0	100.0

Source: World Bank staff calculations based on data from TurkStat.

47 Gereffi and Memedovic, 2003.

Figure 44: Export performance and sophistication



Source: World Bank staff calculations based on data from TurkStat.

126. The Turkish textile exporters tend to concentrate in the final stage of textile production. In 2008, Turkey was the 3rd most important global exporter of apparel after China. About 70 percent of the export value and over 50 percent of value addition is generated by final goods exports in 2010 (Table 12). It is worth noting that the exports of the apparel sector appear to have a cluster of strength in middle and higher sophistication product areas (e.g. outer garments) (Figure 44). The specialization in final goods and the existence of a cluster of relatively sophisticated apparel products in its export basket suggest an effective process of upgrading and transformation of the textiles and apparel sector in Turkey, as confirmed by the fact that the final segment of the value chain dominates both exports and value added. Building on the traditional strength (since the 1980's) of Turkish textile and apparel manufacturers as "full package suppliers"[48] to global brands, Turkish manufacturers of textiles and apparel have more recently succeeded in transitioning and upgrading toward product design and product brand activities (Box 4). As expected, textiles and apparel products are all low- and medium-tech products.

127. The next step of upgrading in textiles is likely to come from product or process development, stages in which innovative machinery and equipment are fundamental. While exports of finished textiles and apparel dominate the textiles sector, more firms seem to enter the exports of machinery and equipment since 2007. Interestingly, while exports of final products and semi-finished goods are concentrated on the EU-15, machinery and equipment are directed toward Asia, the former Soviet Union, the MENA region and Africa. By contrast, the bulk of imports in machinery and equipment still originate from the EU-15. Export and value added growth generated by the production of machinery and equipment is particularly important as the next frontier for upgrading in the Turkish textiles sector is product and process upgrading. Process upgrading, in particular, offers possibilities to increase the share of local value added. This is the case because by improving the machinery, firms increase productivity (new capital investment). Modern machinery is also likely to have more Information and Communication Technology (ICT) and logistics technology embedded in it. If this is the case, the benefits are not only absorbed by the firm that makes the investment, but also by the entire value chain because modern machinery reduces the total time and cost needed for the production and increases the flexibility of the supply chain process.

48 Where Turkish producers deliver the final product, ready to be marketed, to global brands.

Box 4: Examples of own design and own branding in Turkey

Turkish firms moved into the design segment of the value chain as part of a broader strategy to establish the country as a fashion center. Industry associations and government agencies collaborated to promote Istanbul as leading fashion centers, with the target for it to become the fifth global fashion center by 2023. Tight relationships of local manufactures with large global retailers such as Marks & Spencer (M&S) facilitated upgrading into design services. In 2007 Denizli was designing 10 percent of M&S garments manufactured in Turkey. Moreover firms such as Yavuz Tekstil developed their own designs. New regional opportunities stem from the Middle East and Africa, where Turkish designers target a growing demand for new products that combine heritage and modern fashion. Upgrading into own design manufacturing requires building a specialized and skilled workforce. This was done with government support. Organizations such as Istanbul Textile and Apparel Exporter Associations (ITKIB) worked with the private sector and government agencies to establish fashion design vocational training schools. Istanbul Fashion Academy, established by a collaboration between the EU and ITKIB, trains students to the use of the latest technologies, fashion, design, product development, specialized photography, media, management, and marketing.

Upgrading into own branding, the next stage, after own design was supported by the Turkish government, which granted incentives for firms willing to upgrading into branding. These incentives include reimbursements up to 60 percent of the cost for a maximum of three years of personnel expenses, machinery, equipment, software, consultancy, and R&D related material. Leading local firms with own brands and retail outlets abroad include Sarar, Mithat and Bilsar. Erak clothing, originally a full-package supplier with international brands such as Calvin Klein, Guess and Esprit, is now successfully selling its own brand Mavi Jeans in 4,600 specialty stores in 28 countries worldwide. Developing own branding has required an additional effort in terms of fostering adequate workforce development. Organizations such as ITKIB offer short courses in marketing, sales, brand management, recruiting, selection strategies and value added production. Small and Medium Enterprises Development Organization (KOSGEB) provides marketing support to small and medium sized firms and offers training and consulting services for firms to build their capacity in the sector.

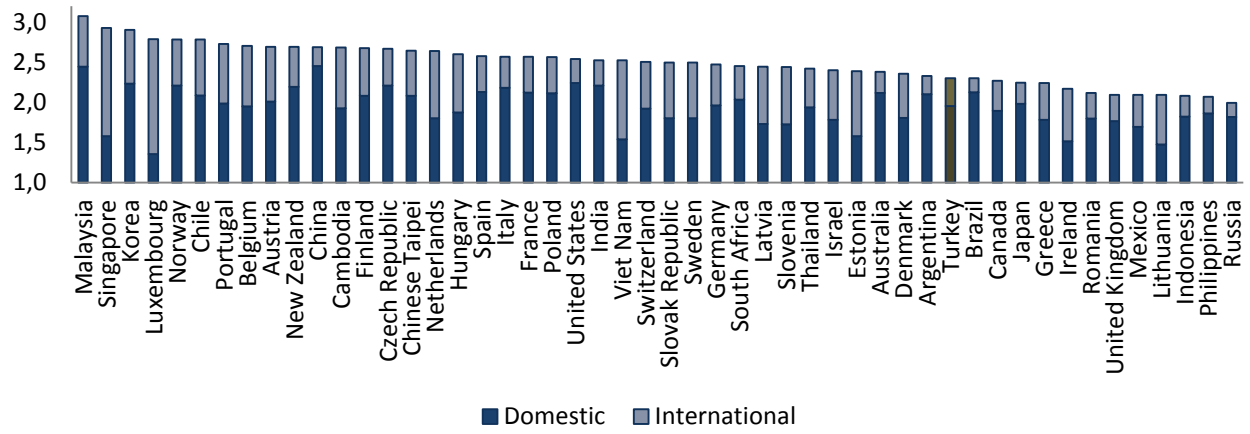
Source: Fernandez-Stark et al. (2012)

AGRI-FOOD

128. The resource-based food industry is characterized by low appropriability of resources. As such it is dominated by those countries that invest in basic and applied research (e.g. Switzerland, France, and US). Most innovation and value added is generated by suppliers through the creation of new machinery, new seeds, new chemicals and fertilizers, and more recently by the application of ICT to agriculture. It is also increasingly important to foster the respect of international sanitary and quality standards, and of intellectual property.

129. The agri-food value chain is also buyer-dominated, but is shorter than the automotive and textile value chains. It is quite complex and it has increasingly a global scale. Buyers (supermarkets, wholesalers, importers) dominate the value chain giving guidelines on what needs to be produced, how it should be grown and harvested. The agri-food value chain is shorter than the automotive and textile value chains. The index for Turkey is 2.3, compared with a maximum of around 3 for Malaysia and a minimum of 2 for Russia. About 85 percent of the Turkish food value chain is domestic, a score similar to Romania, Italy and the United Kingdom. Only about 10 countries have a stronger domestic focus: Brazil, China, Russia and Argentina (above 90 percent), followed by the Philippines, Australia, US, Japan, Indonesia and India (85-90 percent) (Figure 45).

Figure 45: Length of value chains in the food industry by country, 2008



Source: OECD (2012)

130. The number of exporters in the food sector has increased over time in all segments of the chain, although the sector is not very dynamic. The majority of export growth has been concentrated in relatively unsophisticated products, i.e. grains, nuts, lentils. In the past ten years there has been no shift in the preferences of new exporters. In 2010, just as in 2003, exporters were primarily seeking opportunities in the machinery and equipment segment, followed by the final products segment. The lack of dynamism or dramatic changes in the Turkish food value chains is confirmed by the relatively stable trends in exports. In general, the average scale of firms, particularly in the production and export of fresh foods (raw material), is smaller than in textiles and automotive, possibly reflecting simpler value chains.

Table 13: Food, share of exports and value-added in different segments of the GVC

2003	**Final**	**Main**	**Raw**	**Machinery**	**Total**
Export value	34.3	19.2	44.6	1.8	100.0
Value added	48.9	18.5	17.4	15.2	100.0
2010	**Final**	**Main**	**Raw**	**Machinery**	**Total**
Export value	37.4	17.9	42.0	2.7	100.0
Value added	56.0	16.8	13.3	13.9	100.0

Source: World Bank staff calculations based on data from TurkStat.

131. The majority of the exporters specialize in finished products. Although the sector is not as concentrated overall in one particular segment as the textile and automotive sectors, one-third of the exporters specialize in finished products. In terms of export value, 80 percent of the total is generated by final products or raw materials (Table 13). Both final products and raw materials are mostly exported regionally, i.e. to the EU, the rest of Europe or MENA. Imports are also sourced from regional partners, suggesting that the Turkish value chains remain predominantly regional in scope despite the increasing globalization of the sector.

132. While new machinery is one important way to increase value addition in the agri-food value chain, Turkey's exports in this segment are very concentrated. Over 60 percent of total machinery exports are accounted by three types of machines only. These products account for over 60 percent of total machinery exports. On the other hand, raw materials are very concentrated on the import side.[49] The machinery and equipment used for food production is mid-tech. In fruit and vegetables, which constitute the main exports of the Turkish food industry growth has mainly come from less sophisticated products such as edible nuts, beans, peas and lentils.

SPILLOVERS FROM GLOBAL PRODUCTION NETWORKS

133. The integration of Turkish firms into international production networks has the potential to influence the Turkish economy through multiple spillovers. This section presents an analysis of these potential spillover effects by applying the Farole and Winkler (2012) framework to Turkey. Farole and Winkler (2012) assess how foreign investor characteristics (e.g. inputs and technology), domestic firms' absorptive capacity and a country's institutional variables influence intra-industry productivity spillovers to domestic firms from FDI (as a proxy for GVCs)[50]. They use a cross-section of more than 25,000 domestic manufacturing firms in 78 low and middle income countries from the World Bank's ESs.

Table 14: The productivity spillovers of FDI on domestic firms

Mediating Factors		FDI spillovers from firms with full or partial foreign ownership	FDI spillovers from firms with full foreign ownership	FDI spillovers from firms with partial ownership
Foreign firm characteristics	foreign ownership	no effect	+	no effect
	domestic input purchases by FDI	no effect	+	no effect
	technology	+	+	no effect
	labor productivity gap	+	+	+
Domestic firm characteristics	technology	+	no effect	no effect
	size	+	no effect	no effect
	agglomeration	no effect	no effect	-
	share of exports	+	+	+
Host economy characteristics	labor market institutions	no effect	+	no effect
	R&D	+	+	no effect
	share of exports	no effect	+	no effect
	Herfindahl-Hirschman Index	+	+	+

Source: World Bank staff calculations

134. There are three groups of "mediating factors" that determine the potential spillover effects to domestic firm productivity. These are: (i) spillover potential by the foreign firm, (ii) absorptive capacity in the host economy and (iii) national characteristics and institutions.

49 Spelt, common wheat and meslin form 40 percent of the total raw material food imports.

50 FDI presence is a coarse but useful proxy for GVCs. This is the case because global production networks are led by large firms based typically in industrialized countries and relying on complex networks of suppliers around the world (Milberg and Winkler, forthcoming).

135. Analysis[51] specific to Turkey suggests the following (Table 14):

i. **FDI spillover potential by the foreign firms translates into higher productivity for the domestic Turkish firm through three distinct channels: technology, outward market orientation, and inward sourcing strategies of fully foreign owned firms.** The highest spillover for Turkish firms stems from technology intensive FDI. The effect is driven by fully foreign owned firms. Interestingly, the technology intensity matters for spillovers in Turkey but not for the average firm in the sample of 78 low and middle income countries. The other channel through which FDI spillovers materialize is market-orientation. Namely, a higher sector's average percentage of FDI sales to domestic sales in Turkey induces positive spillover effects. This measure, which serves as a proxy for a sector's average FDI motive in a country, is not specific to Turkey. Finally, an inward sourcing strategy of fully foreign owned firms also leads to positive spillovers on domestic firms' productivity.

ii. **On the absorption capacity side, firms that are relatively close in productivity to the median foreign firm benefit most from FDI presence**. A high export intensity, larger size (measured in terms of workforce), more intensive in technology and/or R&D, being located in urban highly industrialized areas also lead to higher absorptive capacity. The effects are broadly similar for spillovers from fully foreign-owned companies and for partially foreign-owned companies.

iii. **Institutional variables (or national characteristics) that matter are threefold**: Turkey's share of exported goods and services as a percentage of GDP, R&D expenditure, and the Hirschmann-Herfindahl index of market concentration. Estimating the effect of full versus partial foreign ownership shows that these effects are driven by fully foreign-owned firms.

136. As a result, high R&D expenditure and/or a high technological intensity in production and export oriented strategies pay off. These variables have a clear positive effect on the productivity of domestic firms, regardless of whether they are measured as characteristics of the foreign owned firm, of the domestic firm or at the country level. Hence fostering R&D and maintaining an outward oriented growth model pays from a policy maker point of view. Other results are also interesting. Clearly, being a supplier of a fully foreign owned company helps boosting productivity. The spillover effects however are higher if the productivity gap between domestic and foreign owned firms is not too high. This suggests that absorption is enhanced by sufficiently high starting levels of productivity. In addition, the results suggest that it is mostly large firms that benefit from the spillover effects of foreign presence in Turkey. Finally, the estimated positive spillover effects here represent the lower bound, in the sense that it does not take into account vertical spillovers, since estimations are intra-industry level. In a comprehensive analysis, Havranek and Irsova (2011) find evidence for positive and economically important backward spillovers from multinationals on local suppliers in upstream sectors and smaller positive effects on local customers in downstream sectors. The findings suggest that a 10-percentage-point increase in foreign presence increases productivity of local firms in upstream sectors by around 9 percent. This suggests the potential for productivity gains for domestic firms from FDI may be even higher when we take into account vertical spillovers.

CONCLUSIONS

137. While there are exceptions, particularly in the apparel sector, Turkey tends to specialize in low value-added segments of the global value chains. But it has a strong potential to upgrade along the chain. Turkey is successfully integrated in GVCs in key sectors and the country's involvement is higher than comparators such as Mexico and Brazil. Although currently Turkey seems to be a preferred destination for assembly activities and to specialize in low value added segments of the value chain, the country's strong presence in sectors with longer than average value chains, represents an important opportunity for upgrading along the chain. Furthermore, Turkey meets an important pre-condition to effectively attracting value-chain related activity. Its trade costs are low and its logistics infrastructure well performing, particularly so when the country is benchmarked against competitors with similar income levels. Upgrading along the value chain has also the potential to have positive spillovers to the rest of the economy.

51 See background paper on GVCs for the details of the analysis and full estimation results.

138. Technology intensive FDI and export-orientation generate the highest spillovers for Turkish firms. Turkish firms' integration in international production networks has the potential to influence the Turkish economy through a broader-based effect; beyond the firms entering GVCs and through spillover effects. High R&D expenditure and or high technological intensity in production and export-oriented strategies have a clear positive effect on the productivity of domestic firms, confirming the significance of the findings of the analysis of the determinants of export quality, discussed above.

139. This chapter also discussed the important role of the services sector in economic upgrading. With services playing a much larger role in production networks, and in particular in supporting countries' competitiveness in the most sophisticated tasks, the next stages of development for Turkish companies will involve increased emphasis on services, building on the existing strength of the sector. An environment that allows the modern and tradable service sector to prosper is what is needed - a topic that is discussed in the next chapter.

5. Competitive Services

INTRODUCTION

140. Turkey's exports of services have grown more slowly than those of its peers. As this chapter shows, this matters because modern services are increasingly traded across national borders and because a competitive service industry is a important driver in the production and export of goods.

141. Competitive services are a key input to manufacturing exports. As inputs, services matter importantly for a country's ability to upgrade to more sophisticated tasks in global value chains. When the embedded value of services inputs in manufacturing exports is considered, the role of a competitive services industry becomes clear. Commercial services, transport and distribution are particularly important. As will be shown below, Turkey's economy and its export performance could significantly benefit from opening key professional service markets to greater domestic and international competition.

142. This chapter first profiles Turkey's services exports. Next, the chapter presents analysis of the role of services as an input to goods exports. Finally, the chapter briefly discusses the degree of competition in the services sector. Collecting data on services trade is particularly difficult and data availability and quality at the time of the preparation of this report were major constraints for the analysis of the competitiveness of services exports. The following analysis aims to be a starting point for better understanding the competitiveness of the sector.[52]

A SNAPSHOT OF SERVICES EXPORTS

143. Turkey's services exports are reasonably well developed.[53] At US$34 billion in 2010, services exports were equivalent to 28 percent of the value of goods exports in the country (or 22 percent of all goods and services exports). The size of Turkey's services export compares favorably to that of the BRICS and regional peers (Figure 46, second graph). The share of services in the total goods and services export basket is higher in Turkey than in all other comparators, with the significant exception of India. And only Poland has higher services exports per capita than Turkey.

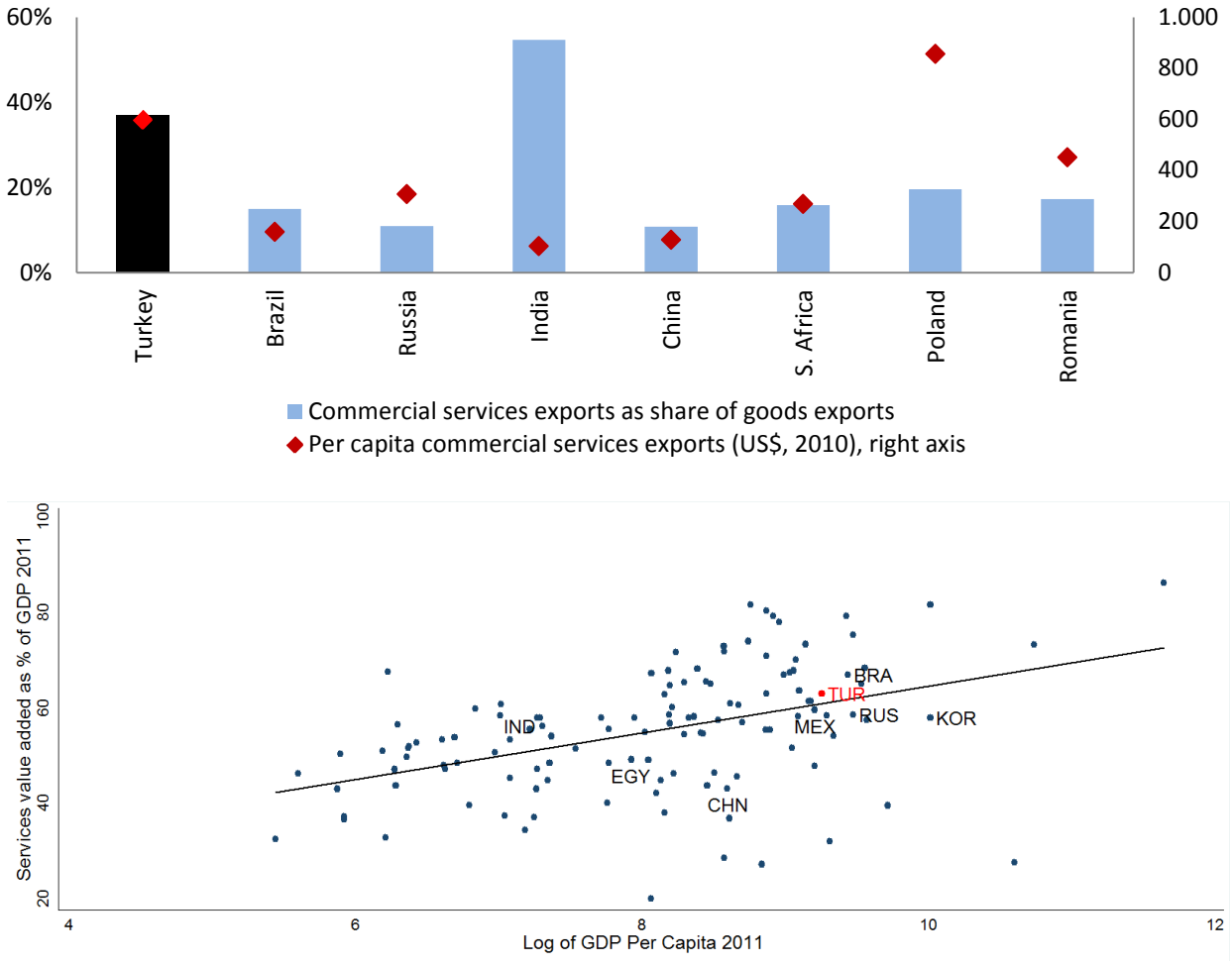
144. This good performance mirrors the dominance of services in the domestic economy. Services account for more than 60 percent of Turkey's GDP with tourism taking a particularly important role both in GDP and in services exports. The share of services in total GDP is in line with Turkey's GDP per capita compared to other countries (Figure 46, first graph).

145. However, despite their importance, the growth in the export of services has been slow over the past decade. Exports of services from Turkey expanded at an annualized rate of 6.8 percent during the decade. This is below the global average and the pace of expansion in relevant peer countries and is also below the 15 percent pace of expansion of Turkey's merchandize exports. Taken together, these facts suggest there might be untapped opportunities for services trade.

52 A detailed analysis of the competitiveness of Turkey's exports of services, using a toolkit recently developed by the World Bank's Trade Department, is under consideration.

53 Commercial services are defined as total services minus government services.

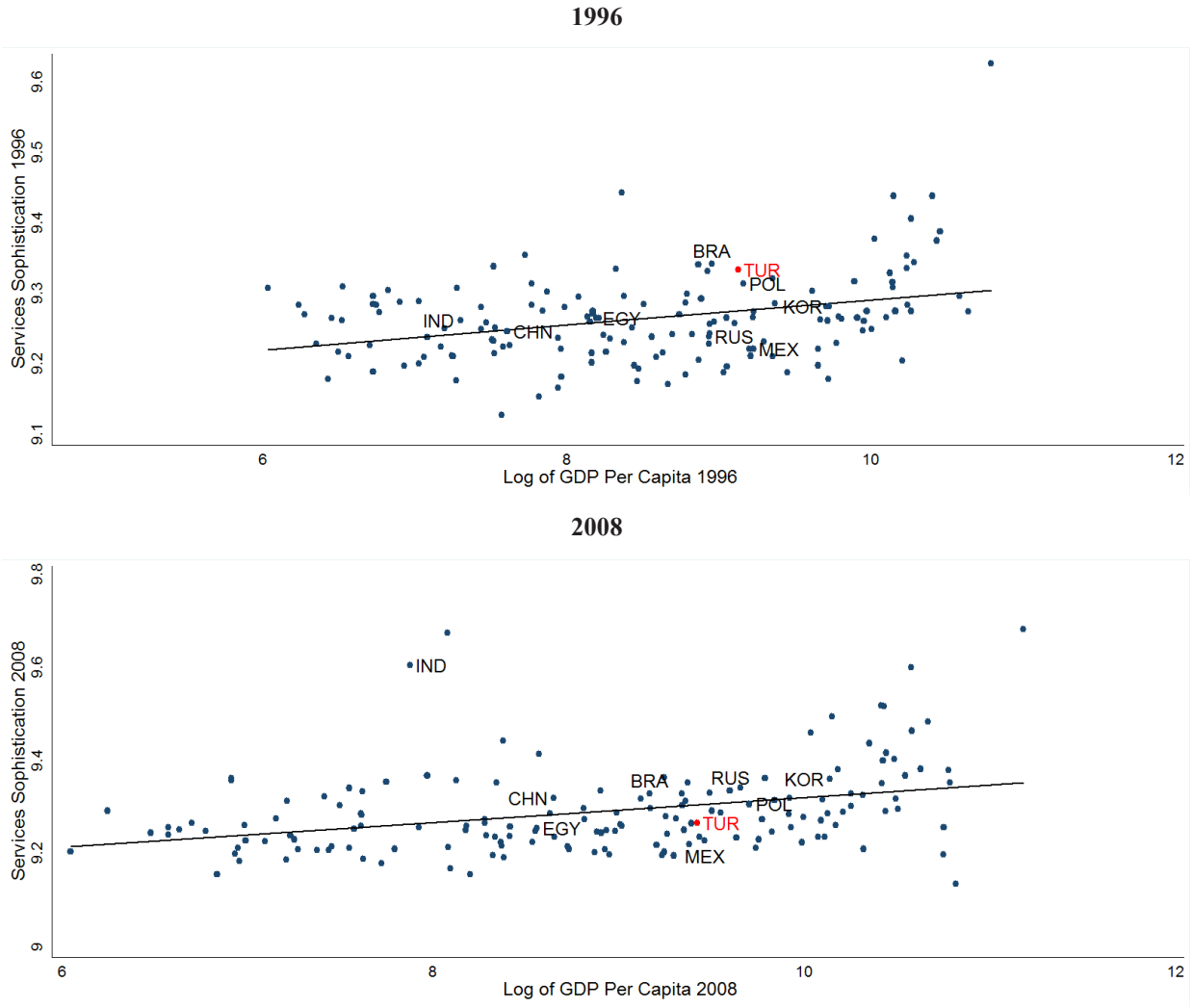
Figure 46: Comparison of scale of commercial services exports, 2010-2011



Source: World Bank's Trade in Services Dataset (TSD).

146. The sophistication of Turkey's services exports has fallen over time. An index of the sophistication of services exports can be calculated in a way analogous to merchandize exports. More sophisticated services are those mostly traded by high income countries such as financial and insurance services or computer and information services. Figure 47 shows that between 1996 and 2008, the sophistication of Turkey's services exports worsened. Turkey has specialized increasingly in service exports typical for middle-income countries, such as transport and tourism, but failed to develop exports of financial, IT or professional services. Indeed, transport and tourism account for as much as 85 percent of total services exports.

Figure 47: Turkey's services export sophistication

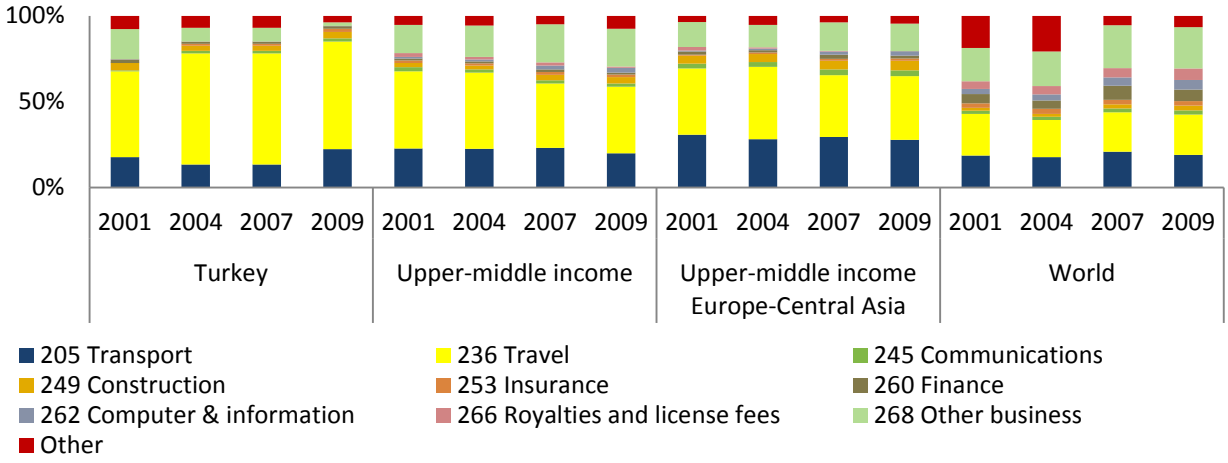


Source: World Bank staff calculations based on WDI, 2013.

147. The tourism sector dominates services exports to an unusual extent. Figure 48 shows changes in the composition of services over time, focusing on 2001, 2004, 2007, and 2009. Travel accounts for two-thirds of Turkish services exports by 2009. This is around three times higher than the global average. Business services, in contrast, account for about 8 percent, half the average of the other upper-middle income countries in ECA.

Figure 48: Structure of services exports, evolution over time

(In percent)

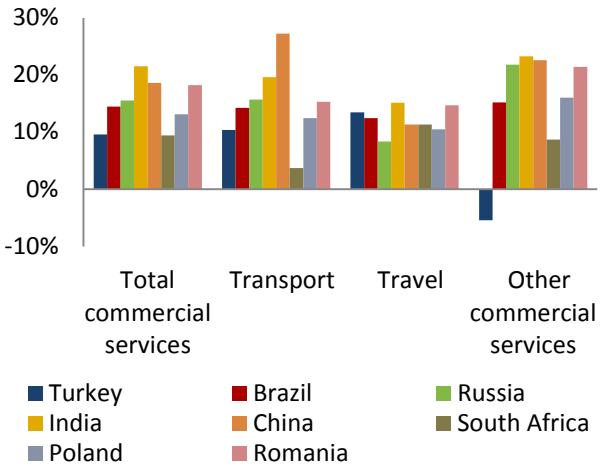


Source: World Bank's TSD.

148. Modern business and professional services are not only a small proportion of total services exports, they also failed to grow much in recent times.[54] During the years 1999-2010, while travel and transport services increased by 13.4 and 10.4 percent, other commercial services exports declined by about 5 percent (Figure 49). It is important to note that this decline is in part due to a change in the methodology of accounting for business services, which was implemented in 2002. But even assuming that business services had grown by 10 percent annually, total modern service exports would still have recorded only modest growth. Thus, there is an opportunity for Turkey to expand and upgrade the services sector, as the country moves towards high-income.

149. Finally, Turkey seems to be well placed to grow in some niche sectors, such as medical tourism (Box 5).

Figure 49: Comparison of commercial services exports growth by category, 1999-2010



Source: World Bank staff calculations based on data from World Bank's TSD and United Nations Conference on Trade and Development (UNCTAD).

54 The analysis in this section is exposed to risks arising from problems in the measurement of services exports, particularly of the computer services category. Improvement in the collection and recording of services sector statistics in the future would enable more robust analysis and results.

Box 5: Health tourism: A niche sector where Turkey is well placed to grow

Developed countries were the main destinations of health tourism with their more advanced and qualified treatment services up until the last decade. However, as the technology and quality gaps decline and cost pressures become more visible, the direction of trade shifted towards the developing countries. Turkey also wants to increase its share in health tourism after narrowing its health gap significantly with the OECD average in recent years, thanks to the successfully implemented 2006 Health Transformation Program. In line with this target, the number of foreign patients visiting the country more than doubled since 2010 and reached 270,000 (according to Ministry of Health, Evaluation report on Medical Tourism in Turkey, 2012).

Overall, health tourism in Turkey is evolving from a focus on short-term care towards greater emphasis on long-term care. Currently, the majority of treatments provided to foreign patients is in areas such as dental and eye care which are not covered by traditional health insurance schemes or plastic surgery, cardiology-cardiovascular surgery (CVS), orthopedics, oncology and brain surgery.

The increase in health tourism is mainly the result of Turkey's price competitiveness in the health sector (Table 15). In addition to price competitiveness the Turkish health sector has other significant comparative advantages including immediate access to the healthcare system, availability of high-tech modern medical treatment methods, central geographical locations and highly qualified hospitals with the number of Joint Commission International (JCI) accredited healthcare institutions in Turkey among the highest in the world.

Table 15: Price comparison of some medical procedures-Turkey vs. selected countries

(In US$)

	Turkey	US	Germany	Thailand	India	Israel
Heart By-pass	11,375-15,000	129,750	17,335	11,000	8,666	30,000
Hip replacement	10,750	45,000	11,644	11,000-14,000	7,000	17,150
Knee replacement	11,200	40,000	11,781	10,500	7,833	12,950
Bone marrow transplantation	40,000-70,000	300,000	250,000	50,000-60,000	40,000	90,000
Gamma Knife	8,676	40,000	16,650-20,000			

Source: Handbook of Medical Tourism, 2012, Ministry of Health

Despite these advantages and current positive trend, the share of health in total tourism revenues remains low and there is significant room for improvement. Accordingly, to discuss the challenges, prospects and strategies in the health tourism sector, with partnership from DEIK (Foreign Economic Relations Board of Turkey), the World Bank team held focus group meetings in Istanbul on June 6th, 2012. Participants highlighted the following points as the major challenges that the sector faces:

- Lack of a common policy and appropriate legislation on health tourism
- Difficulty in obtaining work permit for foreign physicians
- Visa and entry problems for international patients
- Shortage of health care personnel (besides physicians) who can speak foreign languages
- Information dissemination problem about Turkey's well-developed health system
- Imperfect competition between public and private health institutions

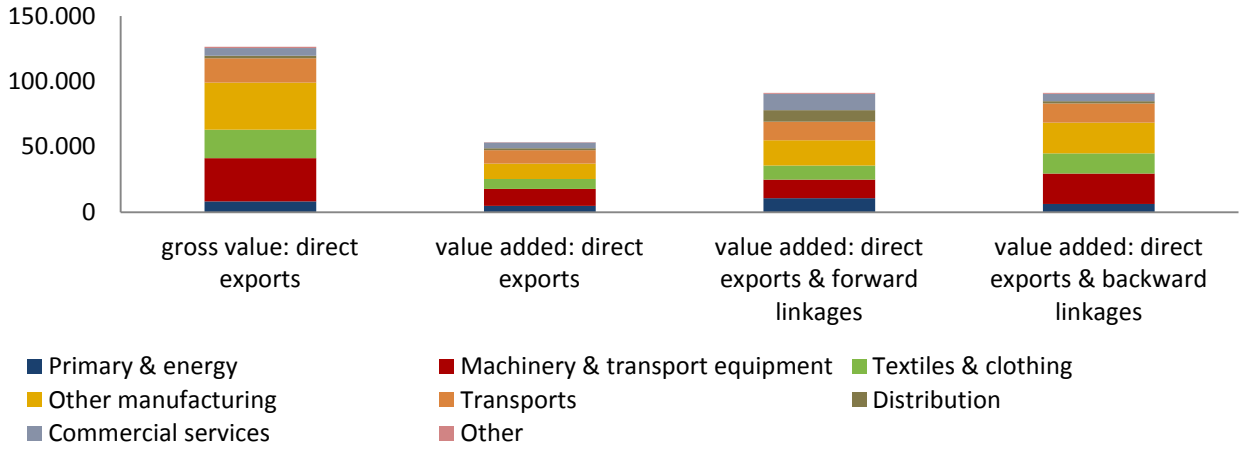
Some of these challenges are partially addressed in the services exports incentive packages of the Ministry of Economy. However, better co-ordination and enhanced cooperation between the private sector and public sector and potential public-private partnership projects like in Philippines (increasing quality and capacity of medical staff) and Brazil (innovation and investment programs) would benefit the health tourism sector of Turkey.

SERVICES AS INPUTS TO THE GOODS SECTOR

150. Services are not only exportable in their own right but also are critical, in their role as inputs, for the competitiveness of goods' exports. Exporting competitive products depends not only on access to raw materials but also on critical services inputs, including efficient, competitively priced utilities (e.g. ICT, transport), financial services (e.g. banking, accounting, and insurance) and other business services (e.g. consulting, legal, and marketing). To understand the importance of services as inputs, this study analyzed the contribution of services to value added in manufacturing, making use of a new database on Input-Output tables developed by the World Bank.[55] The database allows us to look both at forward and backward linkages. Forward linkages represent value added that is embodied in final goods exports through downstream activities, such as marketing or distribution. Backward linkages result from value added that is created by services that represent critical inputs into the production process, such as financial services, energy or other utilities.

Figure 50: Composition of exports, 2007

(In millions of US$)



Source: World Bank's Input-Output and Trade in Value Added Database

151. The results suggest an important role for services as an input to the goods sector (Figure 50). Column 1 in the figure represents the composition of gross exports as recorded by official statistics, while column 2 represents the composition of the value added in exports (i.e. residual after subtracting from export value, the value added generated by foreign inputs and inputs from other sectors). The difference between the two indicates the extent to which each of those sectors relies on foreign inputs and inputs from other sectors. Similarly the difference between column 3 and 2 indicates the importance of forward linkages (the contribution of the exporting sectors to downstream sectors), while the difference between columns 4 and 2 show the backward linkages (how much an exported sector carries value added from other sectors). While manufacturing represented 72 percent of exports on a gross output value basis in 2007 (column 1), it falls considerably when forward and backward linkages are considered (columns 3 and 4). This highlights the embedded value of services inputs to manufacturing exports and underlines the importance of a competitive services industry. Commercial services and transport and distribution services are important. Among commercial services, financial services have the highest share in total exports value added, and have been increasing over time. Transport services follow the opposite trend. Turkey has become a net importer of maritime and road freight transport.

152. Given this importance, policies to increase the competitiveness of services should be high on the authorities' agenda. Reducing the regulatory restrictiveness of service sectors (such as energy, transport, communications, and professional services) provides incentives for entry and for all firms to lower the costs of such services and invest in a greater variety and higher quality of services. Low quality of services can hamper

55 For a description, see the TCD background paper.

growth of productivity in other industries. Considering that many industries grow partly due to outsourcing (specialization of services) and that services are a key input for many sectors, service sector liberalization has secondary effects on other industries. Sectors that rely more intensively on the provision of such services in their production are more severely affected by non-competitive services industries.

153. The services sector in Turkey is subject to a wide range of regulatory restrictions that hamper competition.[56] Regulatory restrictions are particularly prominent among the liberal professions such as notaries, lawyers, engineers, or accountants. Turkey remains one of the few OECD countries where professional bodies or representatives of trade and commercial interests are involved in specifying or enforcing pricing guidelines and regulations. Turkey continues to set minimum prices for at least seven professions, including notaries. The sector of professional services has high barriers to entry through administrative procedures and exclusivity of rights. For instance, there are restrictions on truckers picking up freight on the return leg ("backhauling"), shop hours are regulated, and companies operating railway infrastructure or providing railway services are obliged to serve specific customers[57]. Given that 19 sectors in Turkey rely heavily on transport services as inputs, a liberalization yielding 0.75 percent growth in value added can yield benefits of TL1 billion (about US$500 million) in value added to the economy.

154. Liberalization would allow genuine competition to emerge in key sectors of Turkey's economy which in turn would lower the costs for all industries using these services as inputs. Cross-country evidence further suggests that there is a statistically significant relation between levels of service sector regulation and growth in value added and productivity. These studies have calculated the effect of one country moving toward best practice regulation or at least increasing its service sector liberalization relative to other countries. Building on this work, it can be assumed that a significant decrease in the relative regulatory restrictiveness will yield an increase of between 0.5 and 1 percentage points in annual growth in value added in service-intensive industries, at minimum.

CONCLUSIONS

155. While Turkey's economy is dominated by services, there is much underexploited potential in services exports. So far, exports of services from Turkey are dominated by travel and tourism, building on Turkey's cultural and natural endowments, while professional and business services have lagged.

156. There are some smaller but very dynamic modern services whose exports are growing very quickly albeit from a low base. Lifting the wide range of regulatory restrictions that hamper competition, in particular, in the liberal professions such as notaries, lawyers, engineers, or accountants, could boost the services sector and promote greater diversification of services exports towards more sophisticated modern services.

157. Liberalization of services would boost service exports and enhance the competitiveness of goods exports. While manufacturing accounts for 72 services of exports on a gross output value basis in 2007, this share is considerably lower if forward and backward linkages to services are considered. The embedded value of services inputs to manufacturing exports underlines the importance of a competitive services industry. Commercial services, transport and distribution services are particularly important. Turkey's services sector is subject to a wide range of regulatory restrictions, including on entry and price-setting, that hamper competition. A significant decrease in relative regulatory restrictiveness in services is likely to yield substantial gains in value added in service-intensive industries. Integration with the EU in the area of services would also pay off by helping raise sector's competitiveness.

56 "Turkey: Fostering Open and Efficient Markets through Effective Competition Policies", draft World Bank report.

57 Note however that implementation of the March 2013 Railway Law provides for considerable liberalization of rail services.

6. Challenges and Policy Options

INTRODUCTION

158. Turkey's exports have expanded strongly but they need to make a still larger contribution to economic activity in the decade ahead to help meet the government's ambitious targets. This conclusion is based on three pieces of evidence presented in this Report. First, Turkey did well in mid-tech exports of manufacturing and in tourism services, but has been less successful in high-tech areas and in business services, both of which are more typical of high-income economies. Second, Turkey's export success has been driven by large, established firms, while Small and Medium Enterprises (SMEs) have struggled to make a contribution commensurate with the role they have in domestic production and employment. Third, Turkey is mostly specialized in the middle of the global value-chains. Going forward, the report demonstrates that policies that address Turkey's overall structural deficiencies – rather than individual industrial initiatives – are more likely to help upgrade exports and contribute to a sustained strong export performance. Upgrading exports will need to be addressed by measures to boost productivity, complemented and supported by trade policy – such as increasing trade integration particularly in services and agriculture – and supplemented by export promotion policies.

159. Upgrading Turkey's export basket will ultimately depend on successfully addressing the factors that limit productivity growth. Here, four challenges stand out. First, attracting larger inflows of FDI particularly into manufacturing and tradable services is critical because of the transfer of technology from foreign parents and the demonstrated impact of product quality and on moving up the value chain. Second, Turkey has reached a level of per capita income where promoting innovation and technology adoption and boosting private sector R&D are likely to have substantial pay offs. As demonstrated in the firm-level analysis in Chapter 3, export quality and value-added are strongly linked to investment in R&D. Third, improving the skills of existing workers as well as the quality of the education system will help overcome one of the main constraints to firm productivity. Fourth, improving SMEs' access to long-term and innovative finance would help them overcome stagnant productivity and thus make a larger contribution to economic performance. Improvements to the investment climate more broadly would also contribute to upgrading the export basket.

160. If horizontal policies are appropriate, trade and export promotion policies can have a potentially significant additional role for firms' export performance. Turkey has a long-standing export promotion program, although little empirical analysis has been possible on its effectiveness because of a lack of data. Improved data collection and more evidence based policy making would help Turkey allocate scarce public resources for better impact. While Turkey has substantially liberalized its trade regime, it has been a frequent user of temporary trade barriers, such as antidumping, safeguards and countervailing duties. The list of major import products that are subject to TTBs – including textiles and apparel, metals and electrical machinery – presents some concern for Turkey's competitiveness, since most of these measures are applied to key industrial inputs. There is evidence of the significant role of trade openness, through opportunities to import quality inputs, for export quality and sustainable export growth. Finally, PTAs and trade liberalization are important contributors to export growth, particularly through the expansion at the extensive margin. Trade policy matters for exports, both by opening up new markets and by solidifying access to existing markets.

161. This chapter builds on the analysis of the structural features of Turkey's export performance and competitiveness presented in chapters 2-5. Many of the policy areas discussed below are already included in the government's export strategy for reaching the 2023 targets (Box 6). The chapter concludes with a discussion of the cross-cutting policy areas that are most relevant for enhancing Turkey's export performance en route to high-income status.

Box 6: Turkey's 2023 Export Strategy

"Turkey's Exports Strategy for 2023" initiated by the Ministry of Economy and Turkish Exporters Assembly with the significant contribution of related public and private sectors and NGOs was issued as a government document (through a high planning council decree) on June 13, 2012.

"Turkey's Exports Strategy for 2023" was established, vigorously, in coordination with the public and private sectors within the framework of forthcoming expectations and in parallel with the sectoral targets. It is the first "National Plan" with the aim of becoming one of the world's 10 largest economies in 2023 with the exports of US$500 billion. Along with the macroeconomic targets, the vision of the Strategy comprises of increasing the opportunities of market access, facilitating the supply of inputs used for exports by proper market prices, providing ongoing data flow for Turkish exporters, supporting exports of high-value added, innovative, high brand equity of goods and services, in this manner, providing stable and lasting increase of Turkish exports and making Turkish exporters gain competitiveness power in the world markets with the strong infrastructure of logistics and legislation.

The main goal of the Export Strategy is to increase Turkey's global market share to 1.5 percent (from its current level of 0.8 percent), while increasing exports by 12 percent annually. This growth compares with an average expansion of 16 percent a year from 2002 to 2012.

The strategy has 9 policy areas; market share, investment and infrastructure, environment, technology, partnerships, financing, human resources, regulations, monitoring and evaluation. There are 19 strategic objectives within these areas, with 72 actions (later revised to 76) mapped to these 19 objectives. In addition, there are performance indicators for each of the 19 objectives.

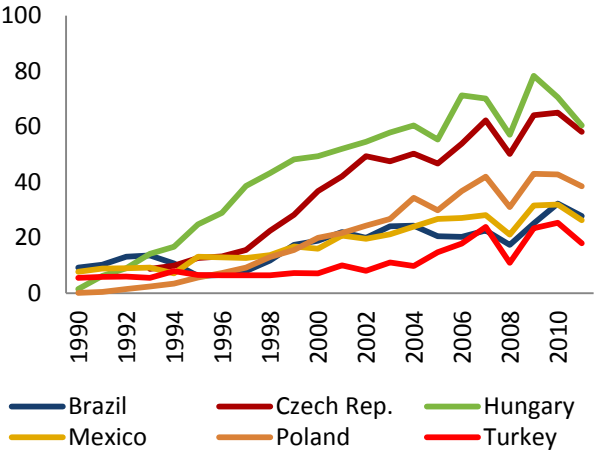
Source: 2023 Turkish Export Strategy, Ministry of Economy

POLICIES TO PROMOTE PRODUCTIVITY GROWTH

162. The challenge of upgrading Turkey's exports and ensuring greater export growth on the extensive margin can be addressed through a common set of cross-cutting policies. These policies include: (i) measures that facilitate inflows of FDI, particularly into manufacturing; (ii) efforts to promote innovation and increased investment in R&D and higher technology; (iii) steps to upgrade the skills of both the existing work force and new entrants; and (iv) measures to improve access to finance, particularly of long-term and innovative nature, with a view to unlock the potential of the SMEs. While these policy areas are most relevant for exporters, there are other broader reforms, particularly in the context of improvements to the investment climate that would also contribute to upgrading the export basket. These reform areas are discussed in detail in other World Bank reports, such as the ICA 2010.

Figure 51: Inward FDI stock

(As percentage of GDP)



Source: UNCTAD.

Boosting FDI

163. Increased globalization of production has led to higher global flows of FDI, with positive spillovers through productivity. Foreign-owned firms tend to be more productive than predominantly domestically-owned companies in developing countries since they operate with more advanced technologies and skills. Hence, there is room for productivity spillovers from foreign-owned to local firms in these countries. In

addition, FDI plays an important role in increasing product quality and diversity in the host economy. The host economy benefits from these newly available advanced products in two ways. If a foreign-owned company operates as an input supplier, local firms have access to technologically advanced inputs, which improve the quality of the goods produced domestically (and in turn, as suggested in the analysis above, to higher quality exports). If an MNC is producing a final good, the range of goods that are both consumed domestically and exported expands. Therefore, policymakers around the world implement different policies to attract FDI to enable spillovers to the local economy.

164. Turkey has not fulfilled its potential for attracting FDI, despite the significant increase in the post-2001 period. As recently as 2004, McKinsey (2004) referred to an "FDI paradox" in Turkey; given the absence of overt regulatory barriers to FDI and the presence of best practice in almost all competitive sectors, one would not expect FDI levels as a percentage of GDP to be much lower in Turkey than in other emerging markets. Since then, the country made impressive progress in terms of macroeconomic stability, but the paradox remains, with FDI inflows still below other emerging economies. While the country does not offer the natural resource abundance that has helped attract FDI to some large emerging markets, it does not compare favorably even to countries that have not relied much on resource-driven FDI, such as Mexico, Poland, or Hungary (Figure 51). In fact, since the mid-1990s, Turkey has not fared as well as most relevant comparators. The Czech Republic and Hungary increased their share of inward FDI stock from 10 percent in the early 1990s to 60 percent in 2011 whereas Turkey's share remained close to 20 percent in 2011. According to the UNCTAD FDI potential index, Turkey ranked 80th in the world in 2009, while its FDI performance ranked 108th in 2010 (Table 16). Despite its geographical location, its large domestic market and the Customs Union with EU, Turkey does not seem to be one of the most preferred destinations for MNCs (Figure 52).

165. While the overall level of FDI is low, the share of foreign investment in manufacturing is even lower. The relatively low level of FDI in Turkish manufacturing sector has been highlighted as a constraint to expanding export quality and exports (Figure 53).

166. Why do multinationals decide to start a business in a foreign country? There are three main

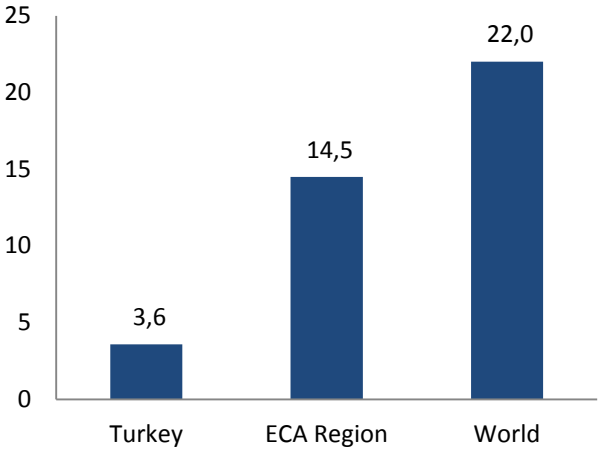
Table 16: The inward FDI potential and performance indices

	FDI Potential (2009)	FDI Performance (2010)
Poland	41	75
Mexico	61	84
Brazil	62	69
Hungary	42	81
Czech Republic	32	50
Turkey	80	108

Source: UNCTAD.

Figure 52: Foreign ownership in exporting firms

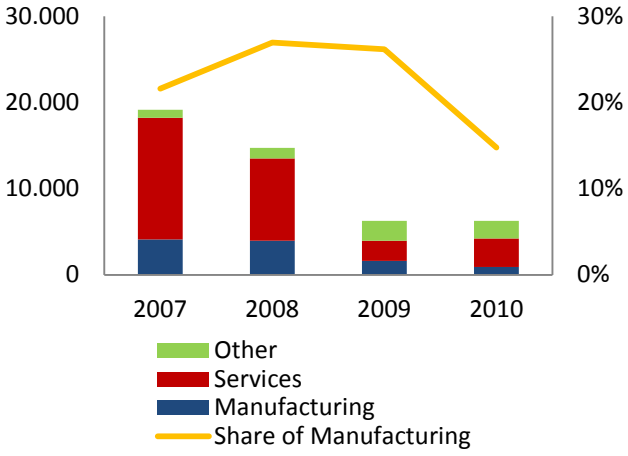
(In percent)



Source: World Bank ESs.

Figure 53: FDI Inflows by Sector, 2003-2012

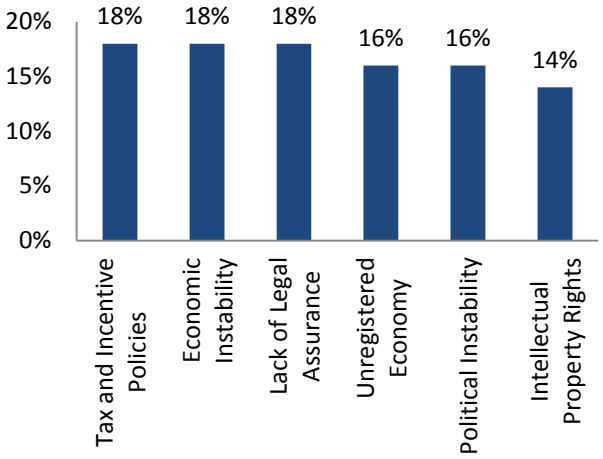
(In billions of US$ and in percent of FDI)



Source: Central Bank of Turkey

reasons. First, companies may decide to build a plant in another country to serve a local market (a horizontal or market-seeking FDI). Firms aim to increase their scale and reduce expenses by eliminating tariff costs. The second motivation is cost-minimization through production with low-cost labor, inexpensive raw materials or getting access to efficient natural resources (vertical or efficiency-seeking FDI). Firms investing for this reason aims to serve both the host and neighboring markets and benefit from lower transportation costs. The third motive is asset-seeking FDI. Under this strategy, the foreign firm aims to utilize the technological assets and skills of the host economy.

Figure 54: Main barriers to FDI in Turkey



Source: YASED Survey 2013-I. Results from the survey question: "What are the 3 main obstacles for FDI in Turkey?"

167. Dumludag (2009) finds that the main motive of multinationals coming to Turkey is horizontal. The study conducts a survey of 52 multinationals in Turkey from different industries and suggests that the market size and the GDP growth rate are main drivers of FDI inflows to Turkey. Absence of natural resources and relatively high unit labor costs are the major barriers to efficiency-seeking FDI inflow to Turkey. However, Turkey's FTAs – led by the Customs Union with the EU – have opened the way for foreign investors who target neighboring markets. The main recipients of asset-seeking FDIs are mostly developed countries. Dumludag (2009) suggests that Turkey does not yet have capability to attract asset-seeking FDI as well, while Czech Republic and Hungary have started to attract more investment in this category. Overall, Czech Republic, Hungary and Poland are able to attract all types of FDIs whereas Turkey attracts mostly market-seeking FDI.

168. Cutting across these motives, foreign companies decide to operate in countries with a suitable investment environment. The views expressed by the business community are split between macro and micro determinants. According to surveys regularly conducted by International Investors Association (YASED), the International Investors Association, the main barriers to FDI in Turkey are microeconomic (Figure 54). In the most recent survey, lack of legal assurance, economic instability and tax and incentive policies are the top three factors, followed by the size of the informal (unregistered) economy. Dumludag (2009) and Loewendahl and Loewendahl (2001) among others also point to a non-transparent and unreliable regulatory framework, a low protection of property rights, and insufficient development of financial markets as important reasons for the low levels of FDI in Turkey.

169. Turkey's business environment is ranked relatively low compared with key competitors and in variance with its ambitions. According to the Doing Business report of the World Bank, Mexico, the Czech Republic, Hungary and Poland are higher ranked than Turkey, while Brazil lags (Table 17). Mexico, the Czech Republic and Hungary also rank higher than Turkey according to the "Business Freedom Index" of the Heritage Foundation. (This index covers the procedures, time, cost and minimum capital requirement for starting and closing a business and obtaining a license.) Turkey is similarly ranked with Mexico and Brazil on an index measuring financial freedom and property rights (an index that measures the protection of property rights by law and the enforcement of these laws), but lags the better ranked new member states of the EU. Although there has been progress as measured by various business and competitiveness indicators,[58] there is thus ample opportunity for Turkey to boost FDI through horizontal measures that increase its investment attractiveness. Simplifying rules and regulations and increasing the predictability of government policies, improving the efficiency of the judicial system and the enforcement of judicial awards, easing regulations for work permits to attract global talent, and liberalization professional services are among the most important recommendations in this regard. The Coordination Council for the Improvement of the Investment Environment (YOIKK)

58 Between 2006 and 2012, Turkey improved its position by 19 places in the "Business Freedom Index" of the Heritage Foundation, 7 places in "Best Countries for Business" of Forbes, 16 places in "Global Competitiveness Report" of World Economic Forum (WEF) and 5 places in "The World Competitiveness Yearbook" of The International Institute for Management Development (IMD).

that consists of ten technical committees working on various aspects of investment climate constitutes a very suitable platform to advance reform efforts in these areas.

Table 17: Business environment indicators, 2012

	DB Ranking	Business Freedom	Financial Freedom	Property Rights
Czech Republic	65	67.7	80	70
Hungary	54	79.8	70	70
Poland	55	61.4	60	60
Turkey	71	67.1	60	50
Brazil	130	53.7	60	50
Mexico	48	82	60	50

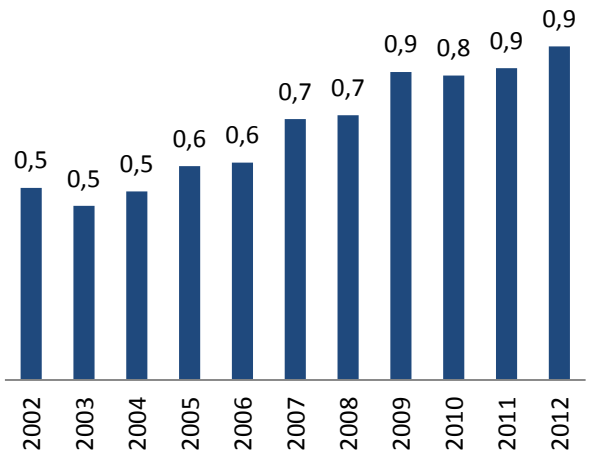
Source: The World Bank and The Heritage Foundation

Innovation, R&D and Quality Standards

170. Adoption of new technology, experimentation, and innovation hold the key to upgrading exports. As discussed in Chapter 3, medium and especially large firms have driven product diversification and quality in recent years, and will continue to be in the best position to invest in research and in innovation more broadly. There exists significant potential for spillovers of technology to SMEs as well as reputation effects from investments in quality and branding.

171. Turkey's R&D spending has increased significantly, but is still lower than in comparator countries. R&D spending rose from 0.5 percent of GDP in 2002 to 0.9 percent in 2011, helped by government incentives (Figure 55). The private sector's share rose from less than a third to 40 percent over the period. Although much improved, Turkey still lags the 1.5 percent of GDP spent in China and the 1 percent in Russia and Brazil or the 2.3 percent in the OECD on average.[59] According to the Global Competitiveness Index of the World Economic Forum, Turkey ranks 56th out of 144 countries by corporate spending on R&D. Despite recent progress, Turkey ranks 70th in industry-university collaboration and 41st in availability of scientists and engineers, all important factors for attracting FDI.

Figure 55: Turkey's R&D expenditure as a share of GDP



Source: TurkStat.

172. Sustained improvement in firm-level innovation would have positive effects on enterprise performance. World Bank research suggests there is room for improvement in Turkey's collaboration between the government, private companies, and universities in areas related to innovation.[60] Other areas of concern include the lack of efficient intermediaries for transfer of publicly funded research to the private sector, through spin-offs, joint research initiatives and technology transfer offices, and the relatively low number of patent applications by Turkish firms, both at home and internationally. Facilitating technology absorption by supporting both R&D and the acquisition and absorption of technologies, can leverage available knowledge for quick productivity gains.[61] Equally important will be enabling technology diffusion within sectors and increasing the commercialization of R&D by increasing the capacity of technology transfer

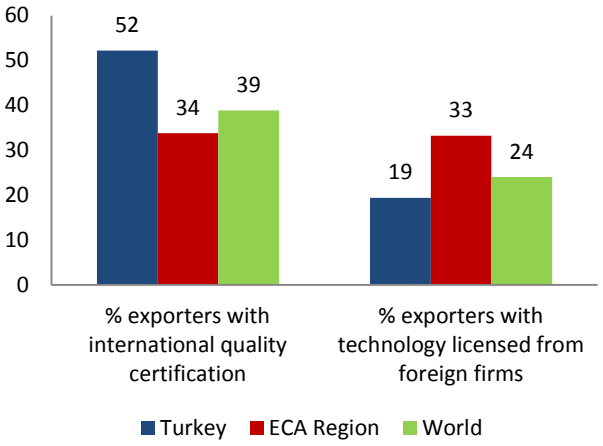
59 Data for Brazil, China and Russia are for 2010 and for the OECD for 2008. Source: OECD.

60 Turkey ICA 2010.

61 See World Bank (2011) Turkey: Improving Conditions for SME Growth Finance and Innovation, for a detailed discussion.

offices and by improving the regulatory framework to provide the correct incentives. Moreover, the return on R&D expenditure will be enhanced by ensuring the consistency of existing incentive schemes and support mechanisms. Finally, case studies of SMEs in certain sectors suggest that the main constraints to upgrading innovation and technology in the enterprise sector are lack of labor skills and limited access to credit, areas which are discussed separately below.[62]

Figure 56: Quality accreditation and technology licensing



Source: World Bank ESs.

173. Turkey's quality certification has increased substantially, thereby contributing to productivity and competitiveness. Through the application of standards, a company can facilitate the adoption of technology and innovation and increase productivity through the embedded product and process information. The positive effects are even stronger when applying internationally recognized quality certification.[63] It is therefore likely that Turkish firms with International Organization for Standardization (ISO) certifications are more technologically advanced and thus more competitive globally. Turkey's application of international quality standards (ISO 9001) has shown remarkable improvement over the past decade, with more than 13,200 certificates issued by the end of 2008. Firm surveys in 2008 found 30 percent of Turkish firms reporting an internationally recognized quality certification. This puts Turkey ahead of other middle-income countries, such as Brazil (26 percent), and Poland (17 percent). Among exporters, this proportion rises to over 50 percent, well above the regional and world averages (Figure 56). However, the percent of exporters with technology licenses from foreign firms is limited to 19 percent in Turkey compared to 24 percent global and 33 percent on average in ECA.

174. While quality upgrades present a challenge in terms of initial cost, they provide exporters an advantage for entering non-traditional markets. Exporters have made huge progress in terms of improving quality over the past decade, but many still feel that lower quality (perception, at least) forces them to compete much more on price, which in turn squeezes profits and potentially raises the vulnerability of exporters. This is particularly a challenge in selling to European markets and in competing against European firms in third markets. On the other hand, in focus group interviews exporters agreed that being forced to adopt EU standards (as well as the increasing harmonization of global standards) has been of huge benefit, as it helps "prove" quality even for firms that have not yet established a recognized quality brand in international markets. Indeed, many exporters agreed that selling to the EU offered a substantial "spillover", as EU accreditation helps to open doors internationally for their products.

Skills and education

175. Upgrading exports relies also on the availability of skilled labor, particularly as the global spread of ICT leads to a decline in the relevance of labor-cost advantage. Firms with a higher share of staff with university education tend to show higher productivity, according to the analysis carried out in the Turkey 2010 ICA. Larger firms are in a better position to afford skilled staff with university education, which contributes to larger firms' better export performance compared to mid-sized firms. A more educated workforce, essential to adopting new technology, is also likely to attract higher foreign investment into the country, as suggested by the analysis of the GVCs presented above. As a result, upgrading the skills set of the workforce is an important element of moving up the value added ladder in exports.

176. Nearly a quarter of Turkish firms rate the education and skills levels of the workforce as a major or very severe constraint on operations and growth (ICA, 2010). Although this is an improvement from the

62 Turkey National Innovation and Technology System, World Bank, 2009.

63 Blind and Jungmittag (2005)

33 percent in 2005, an "inadequately educated workforce" remains one of the top five constraints to firms. This suggests that measures to better coordinate labor supply with the demands in the business sector are likely to pay off in terms of increased productivity and firm growth. Skills are also at the core of improving individuals' chances of finding a good job in the formal sector and being productive at that job, developing new ideas and helping to use existing ones, and becoming a successful entrepreneur. The required skill set includes basic cognitive skills (e.g. numeracy, literacy), technical skills and, increasingly—as countries move up in the value-added chain—higher-level cognitive skills (e.g. problem solving, communication) and behavioral skills (e.g. perseverance, self-discipline, teamwork).

177. The level of the skills of the working age population (particularly for women), remain low, albeit significantly improved. Turkey's results in the Program for International Student Assessment (PISA)—which evaluates 15-year-olds' abilities to apply basic skills in mathematics, reading, and sciences —improved remarkably between 2003 and 2009. However, the average 15-year old in Turkey is still about one full school year behind the average OECD student. Although the educational attainment of youth is quickly increasing, only 42 percent of the 25-34 year olds have completed secondary education (40 percentage points below the OECD average)

178. Improving skills starts with a strong foundation and getting the basic skills right for everybody, and then building job-relevant skills through secondary (including vocational) and higher education. Turkey has near universal primary education and the new primary education curriculum already yielded improved PISA scores. Further reforms are key to lasting skills improvement including reforms to ensure that curricula encompass the full skills set (including innovation skills) and to strengthen quality assurance systems, improving teaching methods, school financing and service delivery. Improving the quality of education through the school cycle is the most cost-effective measures to enhance productive employment over the long run. The challenge in higher education is to ensure the quality of the rapidly expanding sector. The availability of a skilled workforce is also highly dependent on the quality of vocational training, as suggested by the exporters' complaints of lack of skill shortages at the (mid-level) technical staff.[64] The PISA scores point to a sharp wedge between the success rates of general and vocational schools, with students in the latter with the lowest scores.

179. Enhancing the skills of the *existing* labor force is also crucial. Skills are best acquired the first time around (i.e. through childhood and youth) and the government has already made significant achievements in terms of increased coverage and student learning;[65] but changes in the demand for skills require skills upgrading while in the labor force. And the impact of these education reforms will only materialize in the long run, while the growth potential of the Turkish economy is currently impinged by the large segment of the current labor force missed the opportunities to acquire the right skills the first time around. For example, limited English language proficiency among managers, particularly for SMEs, was highlighted by many firms as a significant barrier to entering export markets; thus, skills upgrading for existing workers, through on the job training (OJT), and jobseekers is essential. Despite being one of the countries where employers are more concerned about the skills of the workforce, Turkey is among the countries with the lowest incidence of OIJ: Only about 29 percent of firms in Turkey provide OJT to their employees (World Bank 2010). The main provider of skills training for jobseekers is the Public Employment Agency (ISKUR). Vocational training is in fact ISKUR's main active labor market program to help jobseekers find employment. Analysis of the vocational training programs provided by ISKUR (World Bank 2013) suggests, while the overall effect of these programs on employment is negligible, there's a small impact on the quality of employment (through increased chances of formal sector employment).[66] Finally, ISKUR courses contracted to private providers have a large impact on employment, a result driven by the higher quality and relevance of these courses.

Access to Finance for SMEs

180. Inadequate access to finance seems to be the most acutely binding constraint for SMEs. Even after substantial improvements before the global financial crisis, firms of all sizes perceive access to finance as the

64 Based on focus group discussions, particularly with the machinery sector.

65 Turkey has virtually achieved universal primary education and increased net secondary school enrollment to 67 percent, while at the same time recording an impressive half a year of school gain in PISA scores between 2003 and 2009 (World Bank, forthcoming).

66 Turkey: Evaluating the Impact of ISKUR Vocational Training

single most severe obstacle, according to the 2008 ES conducted by the World Bank. Medium-sized firms appear to be most affected (34 percent of them cite access to finance as a problem), followed by micro- (26 percent) and small-size enterprises (24 percent), and large firms (19 percent).[67] The association of a loan or a line of credit with employment growth is even stronger and is estimated to be correlated with employment growth that is a third faster.[68]

181. SMEs' access to credit all but dried up in the aftermath of the 2008 global financial crisis. While large corporate clients account for 45 percent of bank credit, SMEs received half as much in 2012.[69] Although SMEs are usually in the market for medium- and long-term financing, banks do not usually have adequately structured resources to offer such maturity to them, mostly as a result of the short-term duration of their liability base, thus leaving SMEs open to severe liquidity and interest rate risk. This was evidenced by the events after the global financial crisis, when the major banks significantly cut their exposures to SMEs in a matter of weeks. In addition, lack of cash flow based financing and high collateral requirements further constrain access to finance to SMEs. According to most recent ESs, 72 percent of exporters sell to buyers on credit. At the same time, 70 percent of these exporters also make use of imported inputs – and most of these tend to be paid in cash. This raises the need for working capital finance. While such finance is increasingly available to exporters, its cost remains high, especially for SMEs.

182. Turkish SMEs are faced with onerous collateral requirements and high credit rejection rates. Collateral requirements for amount to 100 percent of loan value for small firms and 91 percent for medium-sized firms. Notwithstanding the higher collateral requirements, the amount of rejected loan applications is also substantially higher for SMEs (17 percent) compared to more creditworthy large firms (12 percent).[70]

183. SMEs' access to finance can be improved through robust macroeconomic policies and continued structural reforms of the institutional environment for credit markets.[71] Although recent macroeconomic policies have been appropriate, memories of macroeconomic weaknesses have been a constraining factor and financial institutions began developing their SME business in the last decade. Less attention has been given to a supportive institutional framework for SME credit markets, as a result.

184. The ability of financial institutions to assess the creditworthiness of SMEs can be supported by better transparency through improved credit information, financial reporting and ability of SMEs to present investment and business plans. Better credit information, the ability of creditors to access the information on SMEs outstanding liabilities and past payment performance is especially important, but is hampered by informality and the underreporting of activities by formally established enterprises. The ability to present financial information and projections in investment and business plans is a possible barrier to finance for SMEs. The credit registry operated by the Central Bank was transferred to the Bankers Association of Turkey in 2011 to improve credit bureau implementation in Turkey. The new center established under the Bankers Association, which became operational in 2013, aims to improve the depth of credit information on firms and individuals.[72]

185. The ability of financial institutions to recover debt from failed enterprises will be supported by better insolvency legislation and its implementation. Effective enforcement mechanisms support the willingness of financial institutions to lend not only by protecting creditors in case of default, but also by increasing the willingness of debtors to repay in a timely manner as a result of a credible threat of foreclosure or bankruptcy. Lending in Turkey has suffered from debtors abusing the bankruptcy law to postpone enforcement.

186. A preliminary assessment of the Turkish secured transaction framework reveals some challenges and possible areas for improvement. Secured transactions are transactions guaranteed by a valuable element that the lender could claim in the case of non-repayment by the borrower. The most important consequence of

67 Investment Climate Assessment 2010

68 Investment Climate Assessment 2010

69 Data from Banking Regulation and Supervisory Authority

70 Enterprise Surveys (Turkey, 2008)

71 Turkey Improving conditions for SME Growth – Finance and Innovation -2011

72 Credit Bureau will be offering new services such as cheques report, risk report and consumer indebtedness index in addition to its traditional services such as scoring.

a good secured transactions framework is that it can make credit available at better terms (e.g. lower interest rates, longer term or larger amount), which are important for the growth of SMEs in particular who may not necessarily own immoveable assets. Some of the key limiting features identified in the Doing Business report include the requirement for a specific description of the secured asset, the lack of a unified registry for various forms of movable collateral, and the limited possibilities for the parties to agree on out of court settlement. The legal framework for secured transactions is fragmented in Turkey including the Civil Code, Code of Obligations, Execution and Bankruptcy Law, and Commercial Enterprise Pledge Act.[73]

187. A well-functioning secured transaction system would make it easier for SMEs to access financing. Secured transactions including an appropriate legal framework, a functioning collateral registry system, a broad range of acceptable collateral and strong enforcement would help ease SMEs' financing constraints. There is a mismatch between SMEs' assets and the required collateral by the financial institutions which constraints SME's access to finance. Only 22 percent of SME assets consisting of immovables (land and real estate) while 73 percent of the collateral taken by financial institutions are land and real estate. With a good secured transactions system, firms will be able to use their moveable assets as collateral and gain access to credit on better terms. Better secured transactions frameworks are associated with more private credit to GDP and less non-performing loans. In addition, defined creditor rights, coupled with an effective secured transaction system, are significant contributors to a deeper credit market.[74]

188. Financial institutions' access to medium term funding is a constraint to their development of medium term lending to SMEs, and a bond market for banks may help mitigate this constraint. Financial institutions rely on very short term funding, which combined with uncertain interest rates and liquidity conditions makes SME lending with medium term maturity risky. In an effort to attract more term funding, including from abroad, the bank regulator in 2011 lifted restrictions on corporate bond issues by banks, which have since seen remarkable growth, although average maturities remain between 1 and 2 years.

189. Leasing products are well suited to the SME market and can be expanded by allowing new leasing products. In November 2012 a new leasing, factoring and financing companies law was enacted. The law introduces new leasing types, beyond financial leasing, and includes provisions to facilitate operational leasing, sub-leasing, software leasing, sell and leaseback as well as financial leasing transactions to be made from foreign countries. Credit risk management in leasing is facilitated by ownership of the leased asset remaining with financial institution. Leasing is therefore a type of investment finance that lends itself well to financing the investment needs of opaque SMEs. Capital leases are already a successful product in Turkey, and the existing leasing industry could successfully expand its range of products.

190. Private equity for SMEs represents a building block for creating a deep and functioning private equity ecosystem. As Turkish private equity and venture capital market matures, SME investment should serve to deepen the market while building deal flow for larger private equity firms. At present, the private equity market in Turkey is heavily biased towards large buyouts or established mid-sized companies while investment in SMEs (small and medium enterprises) remains limited.

TRADE SPECIFIC POLICIES

Trade Liberalization

191. Extensive and frequent use of non-tariff barriers creates risks for export competitiveness. A significant share of Turkey's imports is affected by the large and frequent use of temporary trade barriers, as discussed in Chapter 3. While implementing new import restrictions may be in line with international rules, the economic impact weakens in part the effectiveness of Turkey's relatively low applied import tariffs. As discussed earlier in this report, exporters clearly benefit from accessing high quality imported inputs and the list of major import products in industrial sectors that Turkey covers with TTBs presents some cause for

73 The commercial enterprise pledge covers a limited list of assets and do not include future assets, stock in trade or accounts receivable. The pledgee's consent is required for any operation on the collateral (including replacement). The registries (Commercial enterprise pledge, Vehicles, etc.) are neither electronic nor centralized and searching is cumbersome. And finally, out of court enforcement procedures are not developed and parties need to go through long and expensive judicial enforcement procedures.

74 Safavian, Fleisig and Steinbuks (2006) show that, in countries where secured creditors have absolute priority on their collateral and its proceeds, the credit to the private sector as a percentage of GDP averages 60 percent compared with only 30 to 32 percent otherwise.

economic concern regarding Turkey's industrial competitiveness. New import restrictions on inputs impose higher costs on domestic downstream industries in Turkey and undermine their competitiveness. It negatively affects the ability of Turkish firms to compete in both the domestic market against imports from other foreign competitors and in third markets as exporters. This can also affect patterns of FDI, if Turkish firms and other foreign firms choose against investing in Turkey (where access to key industrial inputs is too costly due to TTBs) in favor of other markets.

192. Export incentives, if targeted effectively, could complement micro reform efforts. While policies to promote local content may have important objectives, if not designed and implemented effectively they may create a disincentive for firms to source quality inputs, which could undermine competitiveness and lower exports (thus, ultimately worsening the trade balance). It would be important, therefore, to keep the cautious approach that has been used by the Government when dealing with these incentives. Instead of using direct incentives to promote local supply chains, policy could be focused on building scale and quality across key value chains.

193. Widening the coverage of the Customs Union with the EU to include services could bring important benefits to both parties.[75] As Chapter 5 showed, Turkey's services sector is subject to a wide range of regulatory restrictions that hamper competition. Turkey's integration with the EU in manufacturing, in terms of trade and investment, contributed significantly to exporters' increased competitiveness. Integration in the services sector could also help increase the competitiveness of the sector. Turkey is currently under-trading in services with nearly all EU member states, its main trading partner, suggesting untapped potential to increase trade. For services, the trade regulatory regimes in Turkey and the EU share similar levels of openness that could facilitate trade integration between the two parties. Nevertheless, there are important sectoral differences. The EU has higher restrictiveness than Turkey in retail services and some transportation services. Turkey is measured as being more restrictive than the EU for professional services and rail services. One option would be to allow Turkey to participate in the EU's single market for services under practically the same conditions as the EU member states. Another would be the establishment of an FTA in which both parties would make market access and national treatment commitments but would not necessarily require adopting additional supporting regulations such as the acquis.

Export Promotion

194. Turkey's export promotion programs are primarily focused on integrating SMEs into the world. Annex 6 lists Turkey's export promotion programs. SMEs constitute the backbone of the private sector in Turkey. Nonetheless, SMEs have important structural problems that include low levels of R&D and low intensity of technology use, insufficient levels of cooperation with universities, limited access to finance, lack of modern marketing techniques, quality and trademark concepts and institutionalization and limited internationalization ability and lack of global supply chain integration. Policies discussed earlier in this chapter such as innovation policies and access-to-finance policies would help address SMEs' challenges for growth. If these horizontal policies are broadly in place, export promotion is more likely to have a positive impact on boosting export performance.

195. The majority of Turkey's exporters are SMEs with limited reach and experience in international markets. They lack the financing to enable them to invest heavily in distribution and marketing, particularly in new markets. As a result, they tend to rely on agents and distributors, who act as middlemen and capture a large share of the profit. This combination of thin margins with low sunk costs makes it much less likely for them to persist in new markets during the difficult, initial years.

196. Outward FDI could be an effective instrument to access non-traditional markets. Linked in part to the scale challenge, exporters expressed the need for greater export promotion support in new markets.[76] This is not, however, for the purposes of trade fairs or even market information (for both of these, services available from national agencies and the private sector appear adequate), but rather for on-the-ground support through the commercial attaches. For some of the new markets, many firms believe that outward FDI is an indispensable ingredient to help them overcome the bias associated with geographical location. The cases of

75 Evaluation of the Customs Union, forthcoming report by the World Bank.

76 Through the focus group discussions held in preparation for this study.

Russia and Central Asian countries were widely cited as destinations where establishing could be invaluable to overcome the difficulties associated with information barriers. At the same time, limitations in access to finance and lack of government support prevent more significant increases of outward FDI.

197. It is important to establish a database of export promotion programs and to regularly conduct impact assessment of such programs. This should help support evidence-based policy-making, and to ensure the effectiveness of export promotion schemes. The government has recently initiated a program to build such capacity in-house for informing policy-making on export promotion programs.

Export Insurance

198. Turkey's export insurance scheme is run by Export-Import (EXIM) Bank. EXIM Bank, a for-profit public institution, started providing export insurance in 1989. Although there are private institutions that provide export insurance, their size and activities are negligible. Because state subsidies are involved, policy makers can decide to allocate these subsidies only to insure exports of specific sectors or trade with specific partner countries.

199. EXIM Bank provides short term insurance, but there has been no medium- to long-term insurance since 2000.[77] The number of companies benefiting from export insurance subsidies has remained low compared to South Korea, which had an efficient export support program. Despite the increase in the total amount of export insurance over the years, the ratio of the insured exports has decreased after 2000 (Table 18). Textile, garment and leather exporters account for almost a third of the EXIM insurance, and firms exporting machinery, electrical equipment and metals for almost as much. Automotive exporters account for a sizable share of exports but for only 3 percent of the provided insurance, mostly because of the low risks.

Table 18: Export insurance provided by EXIM Bank

	Amount of the short-term shipments insured (million US$)	Total exports (million US$)	The ratio of the insured exports to the total exports (in percent)
1995	2.059	21.637	9,52
2000	2.952	27.775	10,63
2005	4.173	73.476	5,68
2009	4.524	102.143	4,43

Source: Akturk and Senol (2010) and EXIM Bank.

200. The regional decomposition of export insurance reveals that more than half of the total is provided for exports to EU countries. This may seem counterintuitive since trade with EU companies would appear to be relatively risk free; but, very likely, the premiums on EU exports are affordable and exporters make use of the available policies. By contrast, one of exporters' biggest concerns with regard to non-traditional markets is the lack of a stable political and business environment. There is much praise for the so-called "Turkish flexibility" that apparently enables Turkish exporters to thrive in less established and structured environments, Turkish exporters still complain about a lack of predictability, stability, and trust in their business dealings outside of the EU. This manifests itself in cancelled orders and, most commonly, in problems with payment collection. In this context, exporters reported that one of the major challenges for entering or operating in non-traditional markets is the problem of payment collection and socio-political risk. Thus further market diversification would benefit from greater availability at affordable rates of export insurance outside trade with the EU. Such a shift in the geographical focus of export insurance would be in line with empirical findings on the effectiveness of state-supported insurance schemes in other countries.[78]

77 Aktürk and Şenol, 2010

78 Baltensperger and Herger (2007) & Abraham and Dewit (2000)

CONCLUSIONS

201. Upgrading Turkey's exports to help reach the government's ambitious 2023 development goals, will require a multi-faceted approach addressing the factors that limit productivity growth. Chief among these are policies that: (i) link the country further with international markets, including by helping bring larger inflows of FDI, particularly into manufacturing; (ii) promote innovation, including by raising the room for companies to invest in R&D; (iii) upgrade the skills both of the existing work force and new entrants; and (iv) improve access to finance, particularly of long-term and innovative nature, with a view to unlock the potential of the dynamic SME sector.

202. Export competitiveness is unlikely to benefit measurably from policies that 'pick winners' among products and sectors. In line with the large scale and frequent use of trade policy flexibilities by many countries, Turkey is also exercising flexibility through TTBs such as antidumping, safeguards and countervailing duties. The list of major import products that are subject to TTBs (including textiles and apparel, metals and electrical machinery) presents some cause for concern regarding Turkey's industrial competitiveness, since most of these are applied to key industrial inputs. It would thus be important, therefore, to implement incentives policies with a view to maintain and promote competitiveness of exporters. Instead of using direct incentives to promote local supply chains, policy could be focused on building scale and quality across key value chains.

203. If the right horizontal policies are in place, export promotion and further trade integration may play a complementary role. While export promotion policies may help, they are not a substitute for horizontal productivity-enhancing policies and can only be complementary, if implemented in a targeted manner. For export promotion policies to work effectively, it is quite important to establish a database of export promotion programs and to regularly conduct impact assessment of such programs. Similarly export insurance schemes may be effective if directed more towards promoting exports to new and non-traditional markets. Finally, there is significant potential benefit from expanding the trade integration with the EU either through amending the Customs Union or through a new FTA in services.

204. The 10th Development Plan includes some of the policy areas discussed above. The transformation programs on "Increasing Productivity in Production", "Reducing Import Dependency", "Increasing Domestic Savings and Avoiding Waste" and "Commercialization in Priority Technology Areas" are aimed at achieving the key (exports-related) targets of the Plan; increasing exports while decreasing "import dependency" and increasing the share of middle-high and high-technology exports.[79] Transformation in the manufacturing industry is envisaged to focus on innovation and increasing productivity and domestic value added is aimed through further integration by value-chains in manufacturing and with agriculture and services sectors. In addition, the transformation program on "Improvement of the Business and Investment Climate" is envisaged to address some of the key problems discussed in this report.

79 Ministry of Development (2013) 10th Development Plan, 2014-2018

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ANNEX 1: DETERMINANTS OF THE CURRENT ACCOUNT

1. Turkey's large current account deficit poses a risk for sustainable high growth. Throughout 2003-06, high growth rates were accompanied by an expansion of the current account deficit. Following a temporary stabilization and reversal during 2007-2009, the external shortfall expanded again in 2010 and 2011, reaching almost 10 percent of GDP in 2011. Savings and investment behavior diverged since 2003, with the saving rate continuously trending downward while investment expanding relative to GDP in 2003-2007 and again in 2010-2011. Although movements in the current account are more volatile over the period, recent worsening of the oil trade balance contributed to the current account deterioration. The rebalancing in the economy and the soft-landing in 2012 helped the deficit to decline significantly to 6 percent of GDP. Yet, it still remains a source of vulnerability, particularly due to the share of short-term financing, which remains elevated compared to pre-crisis levels.

2. Analysis of the determinants of the current account deficit (CAD) for the period 1981-2011, through an extended inter-temporal model of the underlying determinants of savings and investment, suggests:

- Credit to GDP ratio has a negative effect on the current account which can be related to a recent credit boom and easing of the borrowing constraints which consequently led to an increase in investment and consumption without a corresponding increase in savings due to overall financial development. The coefficient estimate implies that an increase in credit of 10 percent of GDP leads to a decline in the current account by 0.58 percent of GDP.

- In line with the Turkish dependence on oil imports, the oil balance has a significant negative effect on the current account—widening of the oil balance by 1 percent of GDP decreases the current account balance by about 0.4 percent of GDP.

- The real effective exchange rate (REER) has the expected negative effect on the current account, although of small magnitude, with one percent appreciation in the REER leading to a 0.01 percent decrease in the current account as a ratio to GDP, implying a potential role for the exchange rate policy in the external adjustment.

- Openness has a positive effect on the current account balance which is in line with the findings in the literature,* although the magnitude of the estimate is slightly higher. This implies that further trade integration of Turkey would have a beneficial effect on the current account.

- Other factors that affect negatively the current account balance were: deterioration in the terms of trade, real GDP growth and worsening in net foreign assets.

- A forward looking analysis of the sustainability of the current account deficit highlights the importance of improving competitiveness and attracting FDI. While the policy actions taken by the Central Bank have been successful in adjusting the current account deficit in the short-term, policies to improve the supply-side performance of the economy, and making domestically produced goods and services more competitive in international markets will be essential in the medium-term. These policies will complement policies towards stimulating private savings in the medium-term.

* Gruber and Kamin (2005) and Chinn and Ito (2007)

ANNEX 2: TURKEY'S AGRICULTURE TRADE – BACKGROUND

1. Traditionally, Turkey's Mediterranean climate and abundant land and water resources comprise the foundation of the country's strong agricultural sector. The sector also benefits from its strategic location next to key markets. Turkey's agricultural export rely heavily on trading partners in Europe and the MENA region, reflecting historical advantages rooted in logistics and culture. Increasingly, however, Turkey's natural resource advantages are driving export growth. Growth in Turkey's exports north into the rest of Europe is driven by the export of fresh fruit and vegetables, high valued products that can best be produced in a narrow set of agro-climatic zones. To the south, Turkish exports to MENA reflect the region's limited capacity to produce staple grains due to water constraints and the growing demand for value-added food products, fueled by populations grow. Growing incomes are driving export growth for high-value products as well, especially in the wealthier countries on the Arabian Peninsula. Furthermore, according to OECD (2013)[80], Turkey is the world's 7th largest agricultural producer.

2. As a member of the WTO, Turkey extends MFN tariffs to all fellow members not qualifying for lower, preferential, rates. All of these agricultural rates are subject to tariff bindings. In addition, Turkey has 17 FTAs in place[81]. The FTA signed with Lebanon is awaiting the ratification of Lebanon while the FTA signed with Kosovo is awaiting ratification from both sides. The negotiations of the FTAs with Ghana and Moldova are completed and FTA's with these countries are planned to be signed in the first quarter of 2014. Meanwhile, Turkey is negotiating with 12 countries/country groups (Ukraine, Colombia, Ecuador, Malaysia, Peru, Dem. Rep. of Congo, Cameroon, Seychelles, Gulf Cooperation Council, Libya, MERCOSUR, and Faroe Islands). Furthermore, there are 12 countries/country groups (USA, Canada, Japan, Thailand, India, Indonesia, Vietnam, Central American Community, other ACP countries, Algeria, Mexico, and Republic of South Africa) that Turkey has launched initiatives to start negotiations."[82] In contrast with the situation in industrial products (where Turkey must maintain the same tariff rate as the EU due to its Customs Union agreement), Turkey is free to reduce tariff rates on agricultural products when entering an FTA.

3. On average, trade policy provides greater protection for agriculture than other sectors. In 2011, Turkey's applied MFN tariffs for agriculture averaged over 41 percent, in contrast to about 5 percent average for non-agricultural goods. In general, the tariffs for agriculture are based on value. Tariff rates on some processed meat products are especially high, ranging up to 225 percent; some dairy product tariffs, like those on buttermilk and cream, are set at 180 percent; duties in excess of 146 percent are applied to some fruit and vegetable products. Still, all tariff lines for agricultural products are bound, albeit at high rates. Tariff escalation, the practice of setting lower tariffs on raw materials and higher tariffs on processed agricultural products so as to protect domestic processing industries is most common for food, beverages and tobacco products. Turkey also maintains a statutory tariff, which can be used to boost applied tariff rates to 150 percent of the statutory rate when deemed necessary, although overall rates cannot exceed those bound under the WTO. Tariff preferences on agricultural products, granted under Turkey's trade agreements, are generally subject to quotas. Turkey provides additional support to the sector by subsidizing agricultural and food exports. These take the form of export returns, export loans and export insurance.[83]

4. As a recent OECD (2011b) report points out, the core objectives of Turkish agricultural policy have changed little during the last fifty years. These are centered around a) providing for food security and raising levels of self-sufficiency; b) improving productivity and the resilience of crops to adverse weather; c) improving competitiveness in agriculture; d) raising and stabilizing farm incomes; e) improving living standards in rural areas; and f) reducing trade barriers between Turkey and the EU.[84] Even so, the instruments used in pursuit of those policies have changed and continue to do so. The 2013-17 Strategic Plan defines five strategic areas in the agricultural sector: i) agricultural production and supply security; ii) food safety; iii) phytosanitary and animal health; iv) agricultural infrastructure and rural development; and v) institutional capacity building.

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80 OECD, 2013. Agricultural Policy Monitoring and Evaluation.

81 Covering EFTA, Albania, Bosnia-Herzegovina, Chile, Egypt, FYR Macedonia, Georgia, Israel, Jordan, Mauritius, Montenegro, Morocco, Palestine, Serbia, South Korea, Syria, Tunisia.

82 More information and updates are available on www.economy.gov.tr

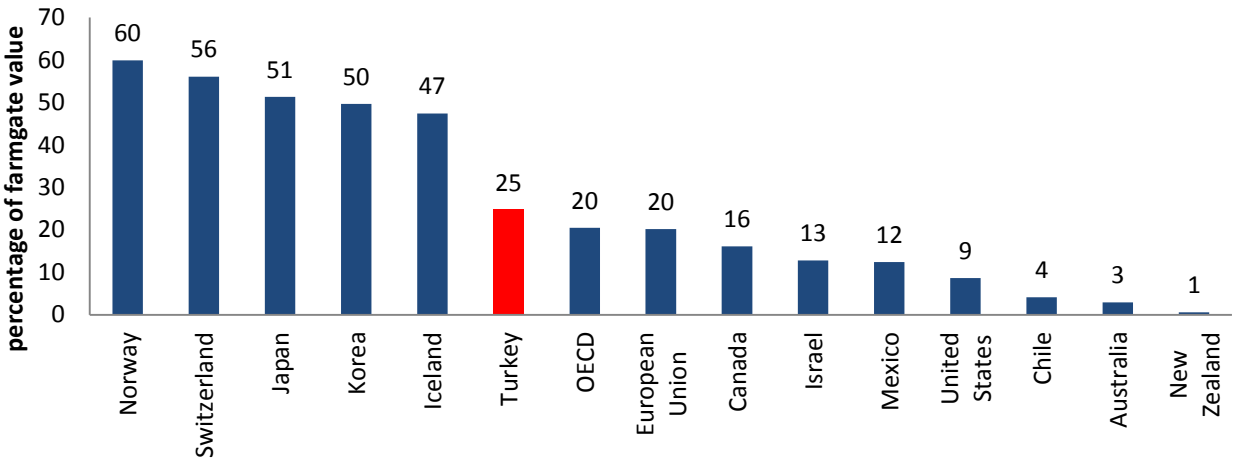
83 For more details on agriculture trade policy, see CEM background paper.

84 OECD (2011b) Evaluation of Agricultural Policy Reforms in Turkey. Paris: OECD.

5. Agriculture policy has relied more on markets after the 2001 reforms and significant efforts have been made towards alignment with the EU Acquis. Although the policy objectives have not significantly changed, policy implementation began to rely more heavily on markets starting in 2001 under the Agricultural Reform Implementation Project (ARIP). Under the ARIP, between 2001 and 2008, state-owned enterprises and the ASCUs were restructured, and the practice of administering commodity prices was abolished. To ease the transition, a National Farmers' Registry System (NFRS) was established and farming households received direct income support that was decoupled from current production. A related influence on agricultural policy in Turkey has been efforts to bring the rules governing the Turkey's agricultural sector and food industry in line with the EU's acquis communautaire, in order to further integrate the two economies. These efforts were supported by the EU's Instrument for Pre-Accession Assistance Program (IPARD) for Turkey, which was approved in December 2007. The Government of Turkey laid out its plan for policy alignment in its Rural Development Program for 2007-13.

6. Yet, most agriculture producers are shielded from international competition by an array of import tariffs. Production quotas are in place for sugar beets. Fresh and processed fruit and vegetables, derived food products, poultry meat and eggs receive export subsidies. Tobacco and hazelnut farmers benefit from a program to help them transition to other crops. Crops that are deemed in short supply qualify for premium payments;[85] oilseeds, olive oil, cotton, cereals, tea and pulses have benefited from the program in recent years. Interest concessions and direct payments encourage the improvement of livestock breeds and land improvements that protect soils and allow the consolidation of small tracks. De-coupled income support, instituted under ARIP, has been phased out, but farmers registered under the NFRS, receive so-called "diesel payments" and "fertilizer payments," which totaled nearly US$45 per hectare in 2011.[86] The livestock sector benefits from a variety of animal husbandry supports. The Government reimburses 50 percent of the premiums on insurance scheme available to all producers, which covers field crops, orchards, greenhouses, cattle, poultry and bees against hail, frost and animal life.

Figure 57: Producer subsidy equivalent for OECD and member economies, average value 2009-2011

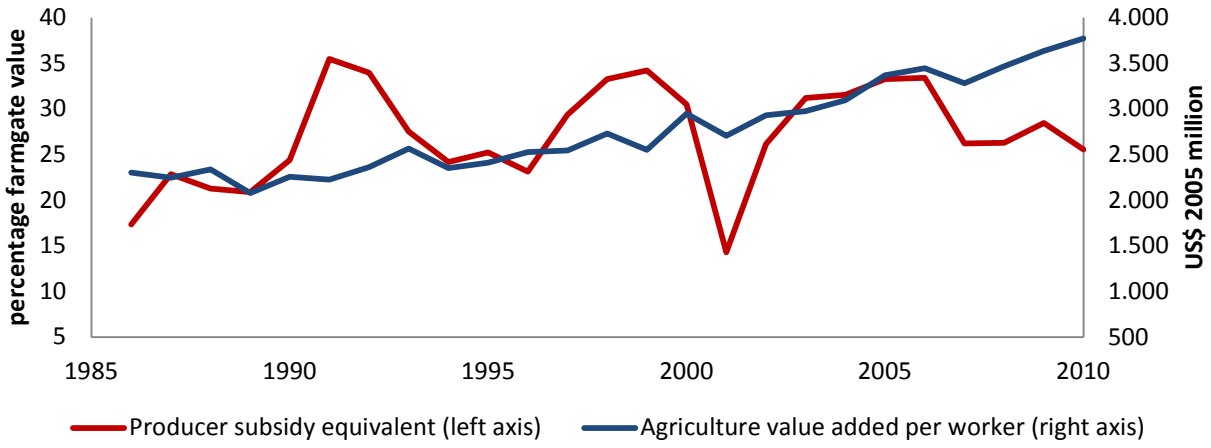


Source: OECD (2012).

85 These are sometimes referred to as deficiency payments.

86 Despite their name, these payments are decoupled and are paid regardless of whether fertilizer or fuel are purchased.

Figure 58: Producer subsidy estimates and worker value-added in agriculture, 1985- 2011.



Source: OECD (2012) and World Bank Development Data (2012).

7. Taken together, the policies provide a level of support for producers greater than in most other OECD countries. Figure 57 shows the average level of support over a three-year period, 2009-2011. The units in the figure, known as Percentage Producer Support Estimates (percentage PSEs), are based on an OECD methodology that calculates various types of interventions into an estimated average value for producers, relative to the farmgate value (including support) of what they produce.[87] From a dynamic perspective, Turkey's levels of agriculture support have been lower than that of EU through 2004, but after the EU successfully lowered and decoupled support to rural areas, EU percentage PSEs fall below Turkey's. Since 2006, rates have declined but remain high. What is also worth noting is that strong producer support does not seem to enhance productivity. Figure 58 shows the growth in value-added per agricultural worker and the percentage PSEs on the same graph. Keeping in mind that the units differ by a factor of 100, differences in the relative volatility of the two series are exaggerated. Nonetheless, the figure shows how weakly the two series are linked. This is especially evident in recent years.

87 http://stats.oecd.org/glossary/detail.asp?ID=2150

ANNEX 3: TRADE COMPETITIVENESS DIAGNOSTIC[88]

1. The Trade Competitiveness Diagnostic (TCD) is a simple guide that facilitates a systematic assessment of a country's position, performance, and capabilities in export markets. It is designed to allow for an analysis at the national level (looking at the export basket and the cross-cutting environment for export competitiveness) but also at the sector level, including services sectors. It therefore enables countries to identify which aspects of competitiveness matter most for specific sectors and which factors have the biggest impact on competitiveness, allowing for actionable and effective policy responses. The TCD is also designed to include both quantitative analysis – including comparison of the country against global averages, regional and income-level peers – while also emphasizing in-depth qualitative analysis, focusing on in-country interviews with key stakeholders across trade value chains. The TCD has two main components:

Summary of main components of Trade Outcomes Analysis

1. **Intensive margin: Orientation, growth, and market share**
   - Trade Openness
   - Trends in Trade Growth
   - Composition of Exports
   - Revealed comparative advantage
   - Trade Integration
   - Market share
   - Trade Partners
   - Growth orientation
2. **Extensive margin: Diversification**
   - Measures of Concentration (HH, Top 5, etc.)
   - Extensive and Intensive Margins
   - Market Reach of Exports
3. **Quality margin: Sophistication & quality upgrading**
   - Technological Content
   - Unit Values and quality ladders
   - Revealed Factor Intensity
   - Sophistication
   - Upgrading: Product Space and Latent Comparative Advantage
4. **Sustainability margin: Firm participation and export survival**
   - Structure of export sector
   - Longevity of trade flows
   - Decomposition of Export Growth and Death
   - Exports Relative to Factor Endowment

Poverty Reduction and Economic Management Network - International Trade Department (PRMTR) has "automated" the process of calculating and graphically presenting most of the above analyses and has available databases and scripts that can allow Bank staff to quickly conduct an assessment of trade competitiveness. This includes the possibility to choose a set of "peer" countries for comparative analysis.

Stage 1: Analyzing trade performance

2. The Trade Outcomes Assessment provides a quantitative and qualitative analysis of historical trade performance using the decomposition of the margins of trade growth as our framework for exploring trade competitiveness. Specifically we define four principal factors on which a country's trade competitiveness performance can be determined: 1) the intensive margin, with a focus on the level and growth of exports as

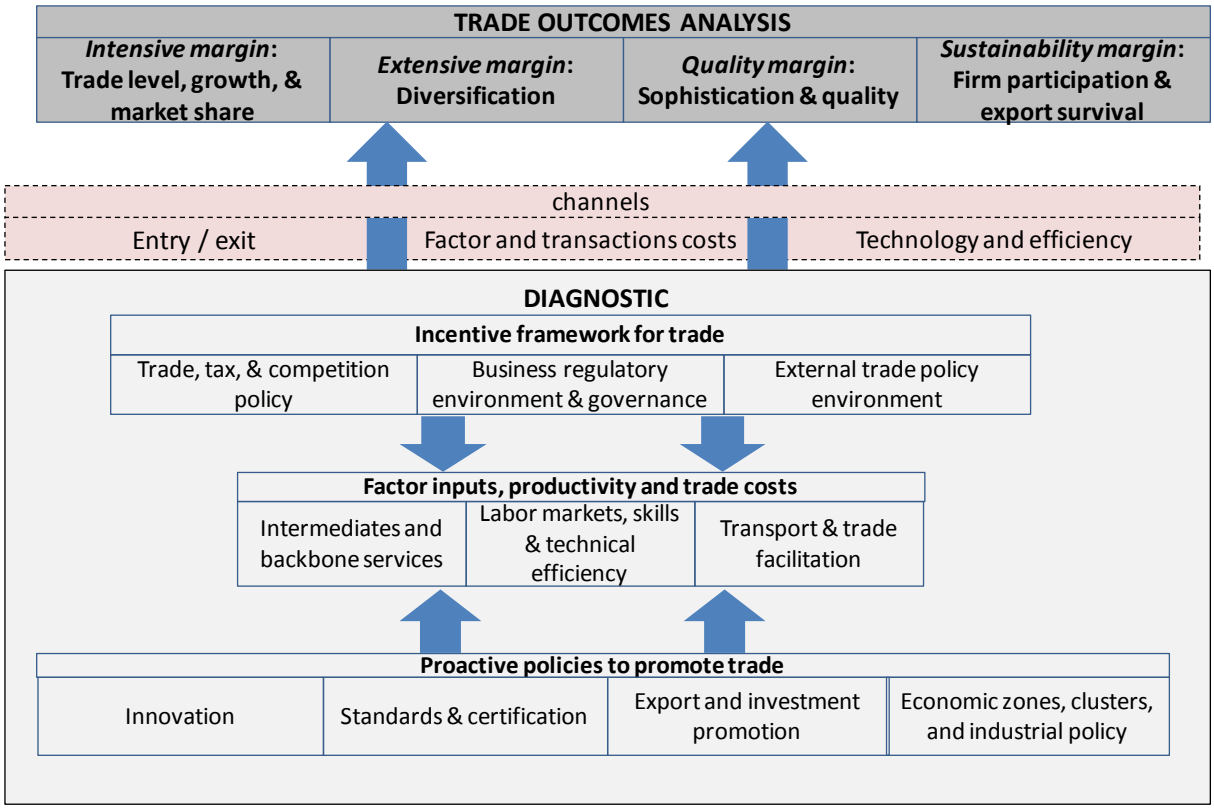
88 Reis, J. G. and T. Farole (2012) Trade Competitiveness Diagnostics Toolkit, Washington, DC: The World Bank.

well as market share performance; 2) the extensive margin, including diversification of both products and markets; 3) the quality margin, focusing on the quality or sophistication of exports; and, 4) the sustainability margin, including the participation and survival of firms in export markets.

3. The analysis combines desk-based research – making use of trade data and tools automated through sources like WITS, WTI, and ITC TradeMap – with reviews of existing policy and analytical work, and in-country consultations. A "trade outcomes" note is be developed as an outcome of the first stage assessment, which not only analyzes performance but raises questions and hypotheses as to the nature of constraints that may be leading to underperformance in some areas.

Stage 2: Diagnostics of binding constraints

4. The diagnostic stage covers a broad range of issues that may have a direct bearing on export performance, as outlined in the figure below:



5. The Diagnostics are organized around the following thematic issues:

- ***The incentive framework for trade****: A*ssesses the degree to which the most productive firms participate in trade or whether an anti-export bias exists. The core analysis involves looking at the trade policy environment as well as the tax and competition policies in a country. The analysis should also be informed by an understanding of the business regulatory environment and governance. Finally, it must take into account the external trade policy environment that firms may face in particular markets (tariffs, quotas, technical restrictions). Normally, assessments of the incentive framework will be readily available from existing sources; in the absence of this additional analysis may be required as part of the Diagnostic.

- ***Factor inputs, productivity, and trade costs****:* Assesses the competitiveness of a country's exporters in product development and execution (production) – i.e. competitiveness at the "factory gate" (or farm or office gate) – and in reaching markets. From a trade perspective, core to this understanding the degree to which trade and investment policy and practice gives exporters access to globally competitive

inputs and backbone services. A second important determinant of general competitiveness includes the labor productivity, and its key components including the functioning of labor markets, labor force skills, and technical efficiency. Finally, it includes analysis of the efficiency of the trade logistics environment, including transport infrastructure, customs and border processes, and logistics services.

- ***Proactive policies to promote trade**:* Covers proactive trade promotion support by governments including facilitating innovation, export and investment promotion (including trade finance), support for achieving standards, as well as special economic zones, and cluster and sector support.

6. Based on the hypotheses generated in the Trade Outcomes Assessment, and based on specific country and sector characteristics, some of these components may be given priority in the analysis and others de-emphasized. For example, if the Trade Outcomes Analysis shows that Country A is performing relatively well in terms of sector and product upgrading, but struggling to extend its reach into new markets, the diagnostic will unlikely look deeply into factor inputs or the incentive framework but will instead focus on understanding any market access barriers and the approach to trade promotion. On the other hand, if the biggest challenge is product diversification, the analysis will focus on the incentive framework, innovation processes, and some aspects of trade promotion.

7. The diagnostic includes a first stage of quantitative benchmarking against peer countries, but the core of the diagnostics assessment involves field interviews with exporters, government agencies, and other stakeholders. The final output is an identification of the main "binding constraints" that contribute to poor competitiveness in export markets.

Carrying out a Trade Competitiveness Diagnostic

8. The starting point for undertaking a Trade Competitiveness Diagnostic is to define the objectives of the assessment. These objectives will vary from one country to the next, depending on its challenges, its trade and industrial strategy, and the planning and policy processes into which the assessment will contribute. Before undertaking the assessment it is important to consider the objectives, how the results will be used (informing dialogue? feeding into strategy?), and the scope of assessment (national v sectoral? broad v focused?). None of these issues need be mutually exclusive, and any TCD may pursue multiple objectives. With the objectives clarified, the next step is to ensure that the resources are mobilized to undertake the TCD, and that a clear workplan is put in place.

ANNEX 4: TURKEY'S TOP 20 EXPORTS TO THE EU AND MENA, AVERAGES 2000-10

Top 20 Exports from Turkey to EU

				PRODY				Median	
isic	Product	Share*	Cumulative	Exports	Wages	Value Added	Prody 2	Wage	Value Added
1810	Manufacture of wearing apparel, except fur apparel	0.14	0.14	8.98	6.79	13.69	-13.99	7.08	16.21
3410	Manufacture of motor vehicles	0.13	0.27	22.21	37.22	118.41	0.85	23.98	76.72
1730	Manufacture of knitted and crocheted fabrics and articles	0.11	0.38	10.12	9.27	24.31	-9.76	8.69	21.50
3230	Manufacture of television and radio receivers, sound or video recording	0.05	0.44	17.55	21.39	53.99	-3.06	18.33	50.65
3430	Manufacture of parts and accessories for motor vehicles and their engin	0.04	0.48	22.30	23.84	54.44	2.74	14.44	43.42
2710	Manufacture of basic iron and steel	0.04	0.52	19.43	19.75	76.54	1.76	21.55	67.26
113	Growing of fruit, nuts, beverage and spice crops	0.04	0.56	7.53			-11.12		
1711	Preparation and spinning of textile fibres; weaving of textiles	0.04	0.59	13.85	12.30	27.78	2.07	11.27	28.34
2930	Manufacture of domestic appliances n.e.c.	0.03	0.63	18.49	19.01	44.02	-0.46	14.78	39.11
1721	Manufacture of made-up textile articles, except apparel	0.03	0.66	11.02	8.72	20.27	-10.95	8.78	27.29
1513	Processing and preserving of fruit and vegetables	0.02	0.68	12.05	9.44	33.76	-9.13	10.99	37.65
2320	Manufacture of refined petroleum products	0.02	0.70	15.79	31.03	406.94	1.06	35.94	304.76
2899	Manufacture of other fabricated metal products n.e.c.	0.02	0.72	20.13	20.32	42.02	0.60	14.67	42.83
2720	Manufacture of basic precious and non-ferrous metals	0.02	0.74	17.66	22.20	99.71	-1.04	21.88	72.21
3511	Building and repairing of ships	0.01	0.75	20.79	26.53	44.56	1.53	21.75	38.61
2520	Manufacture of plastics products	0.01	0.76	23.18	23.56	49.96	4.48	13.12	35.92
2511	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubb	0.01	0.77	23.39	24.48	70.07	6.00	20.14	51.29
3130	Manufacture of insulated wire and cable	0.01	0.78	17.74	19.97	52.56	-0.93	16.12	49.98
2610	Manufacture of glass and glass products	0.01	0.79	18.85	28.50	55.31	1.04	15.38	45.87
111	Growing of cereals and other crops n.e.c.	0.01	0.80	10.35			-0.91		

Top 20 Exports from Turkey to LDC MENA

				PRODY				Median	
isic	Product	Share*	Cumulative	Exports	Wages	Value Added	Prody 2	Wage	Value Added
2710	Manufacture of basic iron and steel	0.16	0.16	19.43	19.75	76.54	1.76	21.55	67.26
2320	Manufacture of refined petroleum products	0.05	0.21	15.79	31.03	406.94	1.06	35.94	304.76
3410	Manufacture of motor vehicles	0.05	0.27	22.21	37.22	118.41	0.85	23.98	76.72
1711	Preparation and spinning of textile fibres; weaving of textiles	0.04	0.31	13.85	12.30	27.78	2.07	11.27	28.34
1810	Manufacture of wearing apparel, except fur apparel	0.04	0.35	8.98	6.79	13.69	-13.99	7.08	16.21
2520	Manufacture of plastics products	0.03	0.37	23.18	23.56	49.96	4.48	13.12	35.92
111	Growing of cereals and other crops n.e.c.	0.03	0.40	10.35			-0.91		
2930	Manufacture of domestic appliances n.e.c.	0.03	0.43	18.49	19.01	44.02	-0.46	14.78	39.11
2899	Manufacture of other fabricated metal products n.e.c.	0.02	0.45	20.13	20.32	42.02	0.60	14.67	42.83
2811	Manufacture of structural metal products	0.02	0.47	20.30	18.64	32.64	-1.19	13.42	32.16
3130	Manufacture of insulated wire and cable	0.02	0.49	17.74	19.97	52.56	-0.93	16.12	49.98
3430	Manufacture of parts and accessories for motor vehicles and their	0.02	0.52	22.30	23.84	54.44	2.74	14.44	43.42
2694	Manufacture of cement, lime and plaster	0.02	0.54	10.04	23.55	127.02	-4.19	23.30	119.62
1514	Manufacture of vegetable and animal oils and fats	0.02	0.56	12.92	12.58	56.08	1.04	17.16	62.98
2424	Manufacture of soap and detergents, cleaning and polishing prepa	0.02	0.58	22.33	24.39	76.13	4.55	18.26	54.63
1531	Manufacture of grain mill products	0.02	0.60	10.78	16.02	60.94	-2.24	14.06	55.34
2919	Manufacture of other general purpose machinery	0.02	0.61	23.21	26.14	52.26	4.03	16.50	38.40
1729	Manufacture of other textiles n.e.c.	0.01	0.63	31.33	18.88	46.93	17.20	11.69	31.41
3110	Manufacture of electric motors, generators and transformers	0.01	0.64	19.18	28.53	43.89	0.63	17.14	39.08
2610	Manufacture of glass and glass products	0.01	0.65	18.85	28.50	55.31	1.04	15.38	45.87

Notes: The shares of exports from Turkey to each market were computed with data from WITS/UNCOMTRADE. The group of MENA countries includes: Algeria, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Morocco, Syria, Tunisia, and Yemen. Under the PRODY category of indicators, the table lists the value of the exports-based PRODY index, the average wage, the value-added per worker, and the PRODY2 index (which is equal to the difference between the exports PRODY and the imports PRODY). The columns under the "Median" heading contain the values of the implicit median wage and value-added per worker of each industry. The heading "Skill Ratio" shows the average ratio of skilled workers over total workers. The units are in thousands of US current dollars PPP-adjusted, except for the skill ratio. Empty cells are due to missing data for a given industry/product. For details, see background paper.

ANNEX 5: LOOKING FOR 'UNEXPLOITED' EXPORT OPPORTUNITIES

1. Each dot in Figure 59 represents an HS-4 digit export product from Turkey. Red dots are products in which Turkey has a revealed comparative advantage and blue dots products that are poorly covered by exporters. The x-axis measures the density of each product, while the y-axis measures global demand. Higher density indicates greater ease for Turkey to gain or strengthen its competitive position in a particular sector. Figure 59 suggests that Turkey already has a comparative advantage in most 'low hanging fruit'. It also shows that the highest growth products are relatively far away from the country's current export basket. Figure 60 focuses exclusively on products in which Turkey does not have a comparative advantage. The color of the dots indicates how many standard deviations away a product is from the average. A higher standard deviation indicates that a product is located in greater proximity to Turkey's current export basket of the country: hence red dots show products that, at more than two standard deviations away from the average, are easier to expand to for the average Turkish exporter. Grey and blue dots, instead show harder to get products, being at less than one and less than two standard deviations away, respectively. Only 13 products out of the 522 for which Turkey does not have a comparative advantage are above the two standard deviations threshold, and therefore close to its current export basket. And if exporters avoided them, there is probably a reason – these products all have relatively sluggish world import growth, they cover a relatively small share of world imports and they are all relatively unsophisticated goods.

Figure 59: Turkey's pattern of comparative advantage

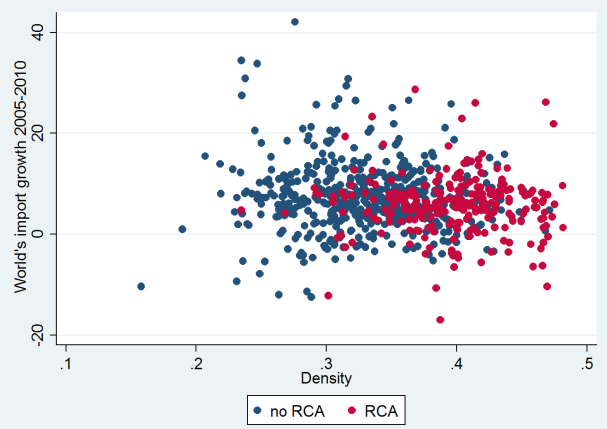
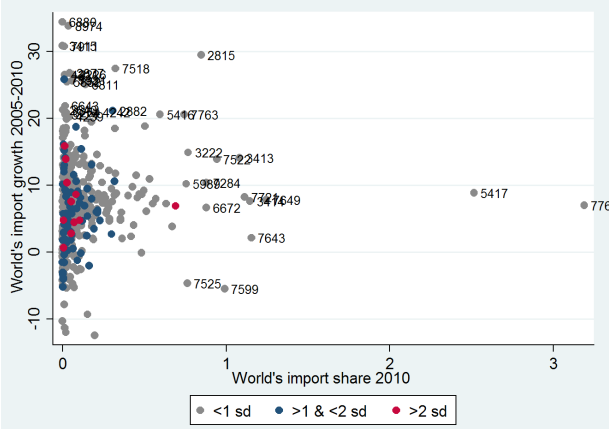


Figure 60: Proximity of Turkish export basket to high growth and large sectors in which Turkey does not have a comparative advantage (RCA<1)



2. Figure 61 gives a sense of the dynamic positioning. Reporting only products in which Turkey does not have a comparative advantage, it distinguishes between those products in which Turkey is gaining market share (green dots) and those in which is losing it (blue dots). The vertical bars show which products are respectively less than one, less than two, and more than two standard deviations away from Turkey's current export basket. Of the 13 'low hanging fruit' Turkey is gaining market share in "outer garments of textile fabrics", "temporary preserves of vegetables and fruits", "corsets, brassieres, suspenders and the like", "sesame seeds", "potatoes", and "sheep and lamb skins". On the other hand it is losing world market share in: "other undergarments", "other clothing accessories", "footwear", "containers of glass", and "molasses". Finally, Figure 62 identifies the proximity of the current export basket to those products which rank among the top 100 both in terms of world import export growth and size, among all those in which Turkey does not have a comparative advantage. "Ferro-alloys" (HS code 6716) and "other sporting goods and fairground amusements" (HS code 8947) are the "easiest" products, being above the one standard deviation threshold the closest to the current export basket. Sectors at more than two standard deviations are rather heterogeneous. The highest growth among the large world import categories include, in decreasing order of growth: "iron and concentrates" (HS 2815), "other office machines" (HS 7518), "diodes, transistors, etc." (HS 7763), "Glycosides, glands or other organs & their

extracts" (HS 5416), and "other coal" (HS 3222), and "other cereals" (HS 412). In all of these Turkey is losing market share. By contrast, sectors of high growth, but smaller in size and still very remote from the current export basket, in which however Turkey is gaining market share, are identified in Figure 61 in the black circle. They include: "oils of animal or vegetable origin", "manganese and products", "office machines not classified elsewhere", "iron, other precious metals", and "coins not used as a legal tender"

Figure 61: Market share changes in sectors of competitive disadvantage (no RCA)

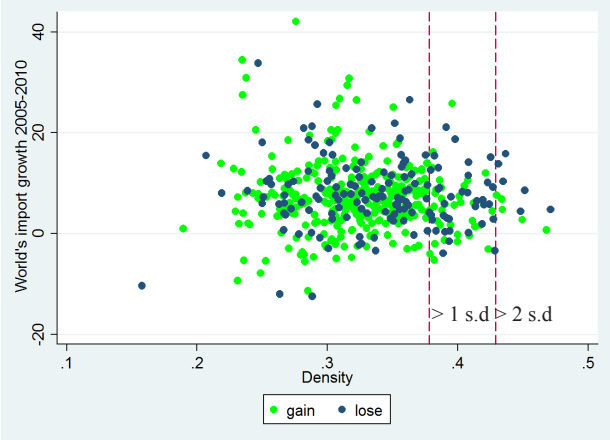
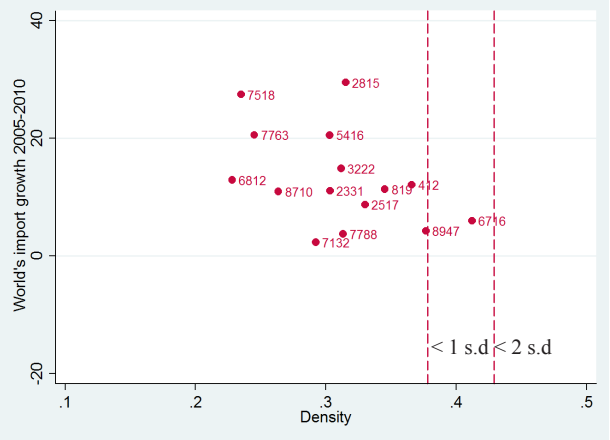


Figure 62: Products in top 100 for world import growth and size of imports, for which Turkey does not have a comparative advantage



ANNEX 6: EXPORT PROMOTION AND EXPORT INSURANCE - BACKGROUND

1. Export promotion policies recently gained more importance. In the aftermath of the global financial crisis with the need to gain further competitiveness in export markets, an increasing number of countries – both industrialized and developing- have offered their exporters a wide range of promotion programs. These programs which range from counseling on the export process to sponsoring trade missions and fairs are mainly designed and implemented to remove information asymmetries and uncertainties, two of the dominating obstacles especially for exporter SMEs. Yet, export promotion policies have been controversial not only because they may run foul of international trade agreements, but also because of questions about their efficiency and distortions they may create.

2. The impact of export promotion programs depends on how they are designed. Specifically, it is important to analyze whether export promotion activities help firms (i) expand at the extensive margin (increase the number of destination countries or the number of products exported) or at the intensive margin (increasing the exports current destination markets or already exported products); (ii) produce differentiated products or produce homogeneous products; and (iii) overcome information barriers in new markets with small export volumes, or expand exports in well established markets with large volumes of exports already.

i. Export promotion at the intensive and extensive margins. Export promotion programs tend to lead to an expansion of the firms mainly on the extensive margin. Both the number of exported countries and the products are found to increase. Such a result implies that export promotion programs remove information asymmetries and enable penetration to new destinations with new products, which generates a more balanced export expansion path. The programs are found to generate stronger effects when information problems are greater. However, there is not a robust significant impact of the promotion programs on the intensive margin of exports.

ii. Export promotion on differentiated and homogenous products. The empirical findings show that export promotion programs favor firms that export differentiated goods, mainly by facilitating an increase at the extensive margin, i.e. an increase in the number of export destinations. However, for those of reference-priced or homogenous products, the promotion programs do not seem to generate significant export growth. Therefore, an export promotion policy should give priority to differentiated export goods where the country has a competitive edge. An additional finding within this context is that program bundling counseling, trade agenda and missions has the largest impact. In other words, combined promotion services are found to be more effective and firms that benefits from one of the promotion programs tend to use the others, too.

iii. Export promotion on different scale of firms. Firms have different dynamics and thus have different promotion needs. Information asymmetries and other barriers to become competitive in export markets tend to be greater for smaller firms with limited experience. Therefore, the impacts of the export promotion programs may be heterogeneous with respect to the different internationalization stages of the firms. These results also imply a policy proposal for export promotion programs: the programs and subsidies should target smaller firms with relatively less experience and at early stages of internationalization as long as these small firms are productive and have the potential to survive in export markets. Within this context programs that provide integral support such as preparatory activities before trade missions to the targeted markets, communication with potential customers, training to properly interact with different cultures are found to be effective.

Box 7: Export promotion programs in Turkey

Export promotion programs initiated and implemented by the Ministry of Economy focus primarily on strengthening the internationalization of SMEs which have the potential to have a competitive edge in the global markets. Some of the recent programs to have internationalized and integrated SMEs into global supply chain can be described as:

1. ***"Improving International Competitiveness" Program:*** With the leadership of business organizations such as chambers of commerce, industry and sector associations, the program encourages SMEs to cooperate and develop effective exports strategies and provides support for needs assessment, business consultancy, and marketing activities. The ultimate goal of the program is to equip the participants with the necessary information and the tool sets to become competitive in the global markets.

2. ***Market Research and Market Access Activities:*** The program is designed to support and develop the systematic market research by the SMEs to penetrate into new export markets or to secure their market share in the existing markets. The main objective of the program is to alleviate information asymmetries and provide more information regarding the potential markets.

3. ***Overseas Trade Fair Participation:*** As its name suggests, the program provides support for SMEs to increase their participation in international fairs and promote Turkish export products in international arena.

4. ***Environmental Costs:*** The objective of this program is to provide support to SMEs during the certification of their quality assurance, environmental management systems (lSO 9000 and ISO 14000) and CE marking.

5. ***TURQUALITY Program:*** The program is designed to spur the activities regarding the promotion of Turkish products' brand image and establishing a brand name abroad. The program provides support to brand image and establishing a brand name abroad. The program provides support to brand creation and positioning activities as well as marketing activities to be realized by Turkish companies in international markets.

3. Export insurance aims to secure exporters' earnings against two types of risks. The first type is commercial risks that accrue related to the activities of the firms, while the second type is political risks which are caused by the changes in the political dynamics of the export market or changes in macroeconomic conditions such as the exchange rates. One differentiating character of export insurances from other insurances is that it usually relies on state support. Due to the high risks in exporting to new markets, the premium that a private insurance company would require for insurance would be prohibitive which more often than not necessitates state intervention. Several studies suggest that export insurances contribute to export performances by raising exporters' profits via decreasing their product costs.

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