

DEPARTMENT OF MANAGEMENT

Chair of Markets, Regulations and Law

***How Global Value Chains can reshape Turkey's  
Economy***

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# The Role of Turkey in Global Value Chains

<b>INTRODUCTION .....</b>	<b>6</b>
<b>CHAPTER 1 TURKEY’S CHALLENGED GROWING ECONOMY .....</b>	<b>9</b>
1.1 INTRODUCTION .....	9
1.2 TURKEY’S GROWING ECONOMY AND INDUSTRIAL POLICIES .....	10
1.2.1 Expansion and Modernization of the Infrastructures .....	14
1.3 POLITICS AND THE “HEDEF 2023”: DEALS WITH SOME WEAKNESSES .....	19
1.3.1 Domestic investments and savings .....	22
1.3.2 Limited sophistication of exports .....	25
1.3.3 Pervasive gender inequality .....	27
1.3.4 Inefficient use of demographic dividend .....	28
1.3.5 Looking for some Solutions .....	29
1.4 SMEs .....	33
1.5 CONCLUSION .....	37
<b>CHAPTER 2 UPGRADING THE TURKISH FIRMS: GLOBAL VALUE CHAINS.....</b>	<b>39</b>
2.1 INTRODUCTION .....	39
2.2 DRIVERS OF GLOBAL VALUE CHAINS .....	39
2.2.1 Technological Progress and Trade Costs .....	40
2.2.2 Economic and Trade Liberalization .....	42
2.2.3 FDI Flows .....	44
2.3 IMPACTS OF GLOBAL VALUE CHAINS .....	46
2.4 DEVELOPING COUNTRIES .....	55
2.5 PARTICIPATION IN GVCs AND ITS CONSEQUENCES .....	62
2.6 IMPROVING GVCs PERFORMANCE .....	67
2.7 CONCLUSION .....	74
<b>CHAPTER 3 THE ROLE OF TURKEY IN THE GVCs .....</b>	<b>76</b>
3.1 INTRODUCTION .....	76
3.2 TURKEY AND EU RELATIONS: EXPORTS, EXPORTERS, PARTNERS .....	77

3.2.1 Main Features of Turkish Trade with The EU.....	81
3.2.2 Bilateral FDI Relations Between EU8 and Turkey.....	84
3.2.3 SWOT Analyses of Existing Business Environment between EU8 and Turkey towards Future Path Ahead .....	88
3.3 TURKEY’S PARTICIPATION IN GVCs .....	91
3.3.1 Motor Vehicles .....	99
3.3.2 Textiles and Apparel .....	103
3.3.3 Agro-food .....	107
3.3.4 Spillovers from Global Production Networks.....	109
3.3.5 Turkey with Rising Business Confidence: Participation in GVCs and FDI position .....	111
3.4 CHALLENGES AND POLICY .....	113
3.4.1 Boosting FDI.....	114
3.4.2 Innovation, R&D and Quality Standards.....	116
3.4.3 Skills and Education .....	118
3.4.4 Access to Finance for SMEs .....	119
3.5 CONCLUSION .....	121
<b>CHAPTER 4 CONCLUSIONS .....</b>	<b>123</b>
4.1 TURKEY’S ACHIEVEMENTS SO FAR .....	123
4.2 CHALLENGES .....	124
4.2.1 Poor Management Quality.....	125
4.2.2 Insufficient Doing Business Environment and Investment Climate.....	125
4.3 DECREASING SHARE OF FDI .....	127
4.3.1 Lack of Human Capital.....	129
4.3.2 Lack of Institutions.....	130
4.4 CLIMBING TOWARD A HIGH INCOME COUNTRY .....	130
4.5 GETTING TO THE POINT.....	132
<b>REFERENCES .....</b>	<b>135</b>
<b>ACKNOWLEDGMENTS .....</b>	<b>139</b>

*To My Family*

## **Introduction**

Turkey has always been a country of strategic significance. Its geographic position as a bridge between East and West, its long and unique history of relations with the European Union (EU), and the particular route that Turkey chose towards modernization after its foundation in 1923, have attracted attention of both historians and political scientists (Laura Tuck, Vice President Europe and Central Asia Region).

This work thesis focuses on Turkey's experience in the transition from lower to higher middle income, a transition that has accelerated in the past decade and has gained Turkey many admirers. Indeed, according to the OECD, by 2060 Turkey will be the 12<sup>th</sup> largest economy in the world, with a GDP of around 4 trillion USD or just around 20 percent less than the forecast GDP of Germany (The World Bank, 2014).

Furthermore, the Custom Union with the EU has opened Turkey up to higher quality imports as well as to European FDI. This has been an important driver of quality improvements. The consequence has been the upgrading of Turkey's export quality and the rising prominence of Turkish producers in Global Value Chains (GVCs).

Turkey's interest in its experience outside the country is strong, but on the other hand, opinions on evaluating Turkey's recent economic and social history remains divided both within the country and among outside experts. There is no accepted narrative on what has worked and what might need to change, which leaves the country vulnerable to costly policy mistakes.

This work will focus on two main themes that describe the increasing attention on Turkey. The first concerns the economic integration that has been the driver for economic progress, where both structural and policy choices have ensured that this progress has been socially inclusive, and hence the policy course chosen has been politically sustainable. The second theme instead, will focus on the fact that, in spite of the remarkable

achievements so far, Turkey has yet to establish the institutional prerequisites of high-income economy. In fact, the risk of the “middle income trap” looms for countries that let off the reform efforts. Improvements in the rule of law, in public accountability and transparency, and in the climate for entrepreneurship and innovation will thus be needed for Turkey to complete the transition to a high-income economy.

Following, in the first chapter, the economic and political environments, which characterize a growing country such as Turkey, will be discussed. The “Hedef 2023” and the priorities highlighted in the 10<sup>th</sup> Development Plan, will be the main topics that are going to give birth to a clearer idea on what made this economy grow on one hand, and what are the challenges Turkey has to face on the other.

The second chapter will take into account the topic of Global Value Chains, focusing on the means altering trade relations between economies, where individual countries, instead of producing an item domestically and exporting it abroad, now make products in parts across a wide array of economies that contribute to a product’s creation by adding value throughout the production process. This brought competitive pressure on governments to adopt reforms that would help their producers to find niches in which they will try to make the most of their capabilities. The drivers and impacts will be analyzed in order to understand the consequences of participating in the GVCs and these will lead to the third chapter, where specifically will be underlined the role of Turkey in the GVCs.

In fact, in this chapter, it will be discussed the position of Turkey that, in order to realize its ambitious export targets, will need to upgrade along the value chain. Already its role is well placed because Turkey has strong presence in economic activities with longer than average value chains, its trade costs are low and its logistics infrastructure is performing well.

Finally, the last chapter will highlight the main achievements but also the remaining challenges Turkey has to deal with. This is done to answer the leading question: can Global Value Chains bring Turkey to be more

competitive in a world where markets are increasingly becoming more internationalized?



# **CHAPTER 1**

## **Turkey's Challenged Growing Economy**

### **1.1 Introduction**

The Republic of Turkey was established on parts of the territories of the Ottoman Empire in 1923 after a bitter War of Independence against the forces that occupied it after World War I. Under the leadership of its first President, Mustafa Kemal Ataturk, Turkey underwent numerous reforms aimed at the Westernization and modernization of the country. The distinctive political legacy of Ataturk continued until the end of the twentieth century. Since then, significant political and economic changes have occurred in Turkey over the past ten years.

The Turkish economy, once known for hyperinflation and budgetary imprudence, was until recently apparently in the era of a renaissance. Over the last decade, the world's 16<sup>th</sup> largest economy grew by \$383 billion, exports rose from \$63 billion to \$135 billion and per capita incomes doubled (in current US dollars) against a backdrop of central government debt shrinkage from three-figure levels to 46 per cent of gross domestic product (GDP).<sup>1</sup>

Several protests in Istanbul have revealed the polarization within Turkey over the social policies and political leadership of the President, once Prime Minister, Recep Tayyip Erdogan. But his electoral success has been rooted in Turkey's economic prosperity, and the sustainability of high growth rates will remain a central issue for the duration of his popularity.

With the occasion of the 9<sup>th</sup> G20 summit in Brisbane, Australia, all member states presented their individual plans to promote "stronger economic growth and employment outcomes". Turkey's growth and employment

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<sup>1</sup> OECD Library, [http://www.oecd-library.org/economics/country-statistical-profile-turkey\\_20752288-table-tur](http://www.oecd-library.org/economics/country-statistical-profile-turkey_20752288-table-tur). The World Bank, <http://data.worldbank.org/country/turkey>.

strategies are based on its 10<sup>th</sup> Development Plan of 2013 and its Medium Term Programs of 2013 and 2014.<sup>2</sup>

In this chapter, an economic overview of Turkey will be given, together with its plans needed to increase the economic growth, considering if it has the abilities to maintain recent growth rates given the status of its overall policy reforms, the quality of its institutions and current global dynamics.

## **1.2 Turkey's Growing Economy and Industrial Policies**

The liberalization of the 1980s went unsupported by macroeconomic policies and institutional reforms, and this brought the economy to suffer repeated crisis in the following decade: in 1991, 1994, 1998, 1999 and, worst of all, 2001. The lack of fiscal discipline and the dependency on monetary financing led to high inflation and real interest rates. Then, thanks to the aegis of former Economy Minister Kemal Dervis, Turkey recovered swiftly from 2001 collapse. He concluded a stand-by agreement with the International Monetary Fund (IMF), liquidated insolvent banks, privatized state-owned enterprises, liberalized the energy and telecommunication markets, introduced a free-floating Turkish Lira (TL), created an autonomous central bank, and set up independent financial and market regulatory bodies. In addition to all of this, Turkey's European Union accession process and policy continuity under the subsequent single party JDP government accelerated the recovery.<sup>3</sup>

Erdoğan's leadership had brought more efficiency and predictability to economic policy-making since 2002. Turkey's central bank had earned consents from financial markets for bringing inflation under control.<sup>4</sup>

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<sup>2</sup> Republic of Turkey, Ministry of Development: 'Tenth Development Plan', <http://www.mod.gov.tr/Lists/DevelopmentPlans/Attachments/4/Brochure%20of%20Tenth%20Development%20Plan%20%282014-2018%29.pdf>.

<sup>3</sup> Mihai Macovei, 'Growth and Economic Crises in Europe: Leaving behind a Turbulent Past', European Commission (Economic and Financial Affairs Directorate- General), Economic 386, October 2009, [http://ec.europa.eu/economy\\_finance/publications/publication16004\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication16004_en.pdf).

<sup>4</sup> Emre Alper and Ozan Hatipoglu, 'The Conduct of Monetary Policy in Turkey in the Pre- and Post-crisis Period of 2001 in Comparative Perspective: a Case for Central Bank Independence', Munich

Credibility became a cornerstone of Turkish economic, fiscal and monetary policies, enabling the domestic business community and foreign investors to engage in long-term planning within a more stable political environment.

One of the main growth factors in Turkey was and still is the domestic demand, fuelled by an expansionary banking policy. Banks financed massively private consumption, and investment spending, thus making GDP increase. Indeed this was supported by the relax liquidity conditions of the international markets at that time. The government played a leading role for the beginning of this positive trend, through the restructuring of the banking system, the improvement of the infrastructure and a challenging economic reforms plan, supported by the International Monetary Fund and aiming to improve the fundamentals of economy and to create the conditions for a rapid and constant development.<sup>5</sup>

Turkey's growth performance not only created a new middle class, who enjoyed the largest gains of household after-tax income<sup>6</sup>, but according to the OECD, it also "reduced income inequality considerably".<sup>7</sup>

Furthermore, while the income of the richest 10 per cent in Turkey was about 18 times of the poorest 10 per cent in 2005, this ration had narrowed to 14 times by 2009.<sup>8</sup> Similarly, the proportion of Turks below the poverty line fell during this period from 20.5 per cent in 2005 to 18.1 percent in 2009<sup>9</sup> and the rate of child poverty declined from one-third of children in

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Personal RePEc Archive, MPRA Paper No. 18426, January 2009, [http://mpa.ub.uni-muenchen.de/18426/1/%20MPRA\\_paper\\_18426.pdf](http://mpa.ub.uni-muenchen.de/18426/1/%20MPRA_paper_18426.pdf).

<sup>5</sup> CIA (2012), The World Factbook: Turkey. <https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html>.

<sup>6</sup> Emre Deliveli, 'Social Implications of Turkish Reforms', Hurriyet Daily News, 15 April 2013, <http://www.hurriyetdailynews.com/social-implications-of-turkish-reforms.aspx?pageID=449&nID=44893&NewsCatID=430>.

<sup>7</sup> OECD (December 2011), 'Divided We Stand: Why Inequality Keeps Rising', [http://www.oecd.org/document/51/0,3746,en\\_2649\\_33933\\_49147827\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/51/0,3746,en_2649_33933_49147827_1_1_1_1,00.html).

<sup>8</sup> Turkish Statistical Institute, [http://www.turkstat.gov.tr/PreTablo.do%3Falt\\_id%3D1011](http://www.turkstat.gov.tr/PreTablo.do%3Falt_id%3D1011).

<sup>9</sup> The World Bank, <http://data.worldbank.org/country/turkey>.

2006 to one-quarter in 2010.<sup>10</sup> Poverty and equality indicators have, however, stagnated since 2010.

There are three main causes of this uptick between 2006 and 2010: a three per cent yearly increase in non-agricultural employment; a reduction in interest on debt payments from 22 percent to 16 percent of the national budget, allowing for increased social transfers to the poor; and a rise in the minimum wage and in the lowest public sector earnings by, respectively, 16 percent and 28 percent in real terms (i.e. omitting inflation).<sup>11</sup>

Meantime, The Turkish middle class expressed the need to show the improvement of its social status and to adopt a Western lifestyle during the economic boom years. To meet this need, it increased considerably the purchase of high quality furniture, fashion and food products, thereby offering great business opportunities to countries like Italy, which are traditionally specialized in these sectors.<sup>12</sup>

The positive trend of Turkish economy led not only to the strengthening of the middle class, but also to the expansion of the upper classes, thus giving impetus to the luxury market.

The rising purchasing power is not the only factor making Turkey an attractive market. The country also has a very young population, with a low median age (less than thirty years) and a high propensity to consume. Many sectors, especially the most innovative ones, such as ICT, benefit from this situation, because their main clients are usually young people (World Bank Group, 2015).

A new era has begun with Turkey as one of the protagonists, in a global economic scenario characterized by the emergence of new powers.

Turkish business system is undergoing deep changes, driven by the dynamics of international markets and by the government policies, outlined

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<sup>10</sup> Seyfettin Gursel, 'Material deprivation among children', Today's Zaman, 22 April 2013, <http://www.todayszaman.com/columnist-313393-material-deprivation-among-children.html>.

<sup>11</sup> Fadi Hakura (2013), Europe Program; 'After the Boom: Risks to the Turkish Economy'.

<sup>12</sup> The World Bank, 'Turkey: Economic Reforms, Living Standards, and Social Welfare Study'.

in a document issued by the Ministry of Industry and Trade, entitled “Turkish Industrial Strategy”.<sup>13</sup>

The underlying purpose of the strategy is increasing the level of competitiveness and efficiency of industry and is made up of some specific objectives.

Turkey’s economy has been moving resources, predominantly labor, from low-productivity activities, such as traditional agriculture and informality to higher productivity, modern industries and the tradable sector. The diversification of investments and exports into the tradable sector raised the added value of Turkey’s productive capacities, its ability to compete in global markets and the private return on invested capital.<sup>14</sup> Besides this, it still shows gaps in the field of high technology. The awareness of this critical element generated a fundamental objective of the national industrial strategy: to increase the weight of medium and high technology sectors in production and exports. To this end, some public interventions aim to support research and development and to foster investment in the production of precision instruments, medical equipment, electronic devices, etc., because such products are technologically advanced and may enable Turkey and its industrial system to become more innovative.

Aligning with the most advanced countries in this field requires huge efforts that cannot be implemented in a short period of time. However, Turkey seems to have chosen the right path. Indeed, the weight of goods such as motor vehicles, machinery and electronic products increased on the total manufacturing output in the last years. On the contrary, the weight of more traditional products, such as clothing, textiles and food decreased (Arcuri, 2013). Nevertheless, these sectors are still an important part of Turkish industry in terms of production, employment and know-how, therefore the

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<sup>13</sup> Republic of Turkey, Ministry of Industry and Trade (2010) Turkish Industrial Strategy Document 2011–2014. <http://www.sanayi.gov.tr/Files/Documents/TurkiyeSanayiStratejisiIngilizce.pdf>.

<sup>14</sup> Dani Rodrik, ‘The Turkish Economy After the Crisis’, Harvard University, 24 November 2009, <http://www.hks.harvard.edu/fs/drodrik/Research%20papers/Turkish%20economy%20after%20the%2000crisis.pdf>.

government means to implement policies aiming to promote them. In particular, government's aim is to incentive the transition of low-technology sectors towards high added value products through actions in support of design, branding and logistics.

### **1.2.1 Expansion and Modernization of the Infrastructures**

One of the most tangible signs of a country's economic growth and also one of its major driving forces is the expansion and modernization of the infrastructure in the broad sense: transport networks, telecommunications, energy etc. Turkey is by far the most advanced nation in its regional context in terms of infrastructure and still has plenty of room for improvement, thanks to the efforts of the authorities, intending to implement by 2023 a series of strategic projects for the country, including roads, ports, airports, railways, hospitals and telecommunication systems.<sup>15</sup> Infrastructure investments concern especially large-scale Public Private Partnerships (PPPs) in the energy and transportation sectors. Turkey has well-developed infrastructure throughout much of the country that is capable of supporting significant development. Turkey has made many reforms to its infrastructure sector to meet the requirements of the EU and continues to invest in its infrastructure.<sup>16</sup>

The government is working to construct new roads using an increased public investment budget<sup>17</sup>, but continues to be challenged to meet the highway demands of a growing population. At the same time, while the government is investing heavily in infrastructure projects, the privatization that has been carried out in many sectors in Turkey is also underway in the

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<sup>15</sup> Republic of Turkey. Ministry of Transport and Communications (2011), Transportation in Turkey—Country Report. <http://www.comcec.org/UserFiles/File/ulastirma/%C3%9CLKE%20RAPORLARI/Turkey.pdf>.

<sup>16</sup> The World Bank (2011), 'World Bank, The Transport: Turkey'.

<sup>17</sup> US Department of State 2011: U.S. Department of State, Bureau of European and Eurasian Affairs. 2011. Background Note: Turkey. May 13. <http://www.state.gov/r/pa/ei/bgn/3432.html>.

transport sector with respect to motorways, bridges, Turkish Airlines, ports, and other transport infrastructure<sup>18</sup>.

In summary, to crowd in private investment and boost growth Turkey aims to raise the savings rate from 14.4 per cent in 2013 to 19 per cent in 2018 and achieve a primary surplus target of 2 per cent of GDP until 2016. Turkey also plans to increase its investments rate from 20.3 per cent of GDP in 2013 to 24.4 per cent of GDP by 2018 as well as introduce new financial instruments tailored for institutional investors, such as pension funds (Arcuri, 2013).

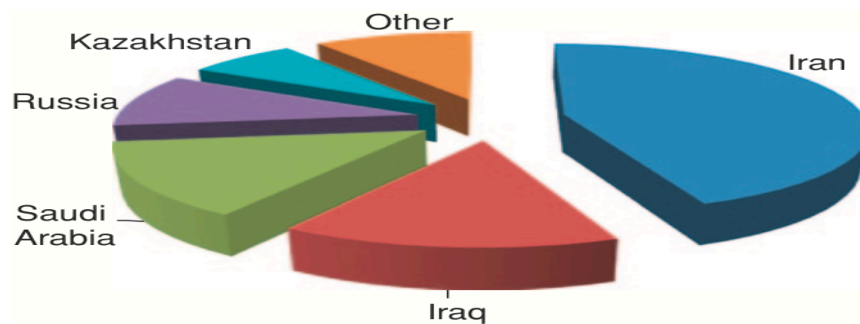
Specifically, in order to attract long-term investors, the country is implementing regulations on private pension funds, venture capital/private equity investment funds, and real estate investment companies and funds.

Concerning the energy sector, Turkey is not only a leading economic power, but also an important energy player, thanks to its geographical position. Indeed, the country is located between the Middle East and Caspian areas, oil and natural gas suppliers, and the Western Europe countries, large importers of such resources. This strong point is counterbalanced by a traditional weakness: a limited availability of domestic energy sources, resulting in massive imports of oil and gas from abroad and in a heavy dependence on Russia. Natural gas is also imported from Azerbaijan and Iran directly through the pipeline link. Turkey also purchases some liquefied natural gas from Algeria and Nigeria. In addition to Iran (Figure 1), which supplies large quantities of oil, Saudi Arabia, Iraq, Syria and Libya are also suppliers to Turkey (Energy Information Administration 2011).

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<sup>18</sup> Republic of Turkey Prime Ministry Privatization Administration 2011, [http://www.oib.gov.tr/index\\_eng.htm](http://www.oib.gov.tr/index_eng.htm).

*Figure 1: Turkey's crude oil imports by country*



*Source: Eurostat data, U.S. Energy Information Administration's website.*

Indeed, the country is a natural bridge between the Middle East area and the Caspian region, producing oil and natural gas, and the states of Western Europe, large consumers of these resources. The geographical position explains why Turkey was chosen as a transition point of important gas and oil pipelines, completed or under construction, thereby becoming an important energy hub of the Eurasian platform.<sup>19</sup>

A process of liberalization and privatization in the oil and gas sector is underway in Turkey. Major companies, such as Tüpraş and Petrol Ofisi, which were formerly state-owned, are now privatized entities (Republic of Turkey Prime Ministry Privatization Administration 2011). BOTAS, a company that operates oil and gas pipelines, is being restructured to allow private enterprises to enter the gas marketplace.<sup>20</sup>

The new regulations and infrastructure projects in the field of gas are very important, not only because this resource is widely used as fuel for domestic and industrial use, but also because it is the main source for the production of electricity.

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<sup>19</sup> Colonnella C (2010) Consolato Generale d'Italia ad Istanbul—Ufficio Commerciale, Il settore energetico turco. [http://www.varesexport.it/files/missioni/2012/DOSSIER\\_ENERGIA.pdf](http://www.varesexport.it/files/missioni/2012/DOSSIER_ENERGIA.pdf).

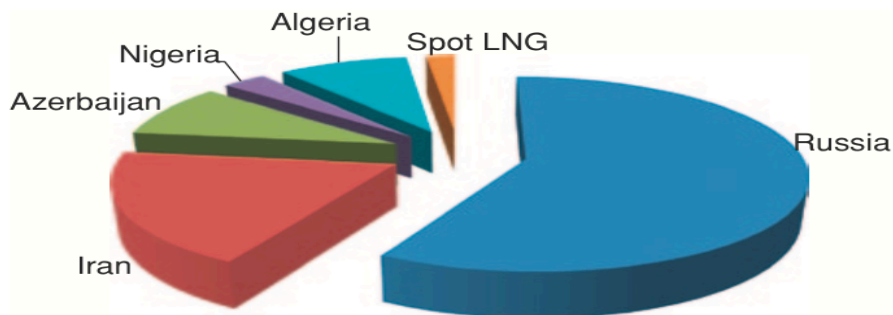
<sup>20</sup> BOTAS Petroleum Pipeline Corporation, <http://www.botas.gov.tr/eng/about.asp>.



The Turkish energy policy regarding the gas sector is a matter of political and economic concern. First, the global gas consumption increased considerably in the past decades and is expected to continue growing, with unavoidable repercussions on the price of the resource and on the energy bill of the major importing countries, Turkey included. The Anatolian country produces only 2 per cent of the natural gas used and imports the remaining 98 per cent from Russia, Iran, Azerbaijan, Algeria and Nigeria (Figure 2) (Ratner, Belkin, Nichol, & Woehrel, 2013). Moreover, Russia-Turkey relations should become even closer in the future, because the Russian gas import is expected to increase and some Russian companies have been trying to enter the Turkish energy market, gas sector included, through acquisitions and investments.

Turkey currently imports large amounts of gas from Russia through the Blue Stream pipeline, extending from Siberia to the Black Sea and reaching the Turkish port of Samsun.

*Figure 2: Turkey's natural gas imports by country, 2011*



*Source: EMRA data*

Turkey's growth strategy for the energy sector strives for diversification and greater dependence on domestic rather than foreign sources of energy. Specifically, the country would increase the percentage of domestic resources in total primary energy demand from 27 per cent in 2012 to 35 percent in 2018. Although the government paid about \$60 billion for

imported fossil fuels in 2013, the drop in prices provides greater fiscal space.

In addition, Turkey has interesting prospects in the field of renewable energies.<sup>21</sup> They attract huge public investments aimed at creating viable alternatives to traditional sources and generating growth and employment.

Also, Turkey plans new investments in coal-fired and nuclear power plants; coal-fired plants cause high levels of greenhouse gas (CHG) emissions and the nuclear plants of Turkey may be built in the vicinity of an earthquake-prone region<sup>22</sup>

Gas is widely used to generate electricity, but the increasing price of such resource and the geopolitical issues related to its supply persuaded the Turkish government to promote policies aimed at reducing the amount of gas used. To this purpose, it decided to grant incentives for the use of local coal and to construct some nuclear power plants by 2030. Turkey reached an agreement with the Russian state-owned company Rosatom for the construction of a nuclear power plant in Akkuyu, a village located on the Mediterranean coast, and reaffirmed its intention to continue its nuclear development, even after the accident at Fukushima nuclear power plant, that aroused public concern in Turkey, just as it did in every other part of the world.<sup>23</sup>

The Turkish authorities are actively committed to developing renewable energy sources, which are still largely underutilized. For example, it is argued that wind energy is exploited only for 15 per cent of its potential and can take an important place within the energy sources of the country through numerous projects aimed at increasing the installed capacity.

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<sup>21</sup> Republic of Turkey Prime Ministry (2010); Turkish Energy Industry Report. <http://www.invest.gov.tr/en-US/infocenter/publications/Documents/ENERGY.INDUSTRY.PDF>.

<sup>22</sup> Huffington Post (2011): Turkey Coastal Nuclear Plant To Be Built Near Earthquake-Prone Area Draws Fierce Opposition.

<sup>23</sup> IAEA (2014), Country Nuclear Power Profiles-Turkey, <https://cnpp.iaea.org/countryprofiles/Turkey/Turkey.htm>.

Geothermal and solar sectors, taking advantage from the natural features of the Turkish territory, have also been expanding rapidly. Indeed, Turkey ranks first in Europe and seventh in the world for geothermal resources and shows very high solar radiation levels (Arcuri, 2013).

To better exploit these resources, the public and private sector made huge investments and will make further ones in the incoming years, in some cases with the involvement of foreign operators provided with specific technical knowledge. For example, the Italian company Enel Green Power and the Turkish group Uzun started collaboration, by forming a company operating in the field of geothermal exploration and research to examine sites located in the western part of the country and to produce electricity and heat.<sup>24</sup>

Turkey's strategy could be used to challenge its credibility in the environmental safety and climate change discourse.

### **1.3 Politics and the “Hedef 2023”: Deals with some weaknesses**

Erdogan's 2011 general election slogan, “Hedef 2023” (“Objective 2023”), set the ambitious target of tripling the size of economy, increasing exports to \$500 billion and joining the world's top ten economies by 2023, the centenary of the Turkish Republic.<sup>25</sup>

Turkey would need annual growth of nine per cent to satisfy the former prime minister's expectations, of which 3-4 per cent is “guaranteed” growth assuming a two per cent US dollar inflation and 1-2 per cent yearly appreciation of the Turkish lira. This means that during the next years Turkey needs at least an annual average GDP growth rate of five per cent, grounded on exports rather than domestic demand.<sup>26</sup>

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<sup>24</sup> Enel Green Power, Annual Report 2011 ‘Geothermal Agreement in Turkey’, [http://www.enelgreenpower.com/it-IT/doc/media\\_investor/reports/2011/Annual\\_Report\\_2011.pdf](http://www.enelgreenpower.com/it-IT/doc/media_investor/reports/2011/Annual_Report_2011.pdf).

<sup>25</sup> Ali Bulak, ‘Erdogan's 2023 target’, Today's Zaman, 19 April 2011, [http://www.todayszaman.com/columnist/ali-bulac/erdogans-2023-target\\_241448.html](http://www.todayszaman.com/columnist/ali-bulac/erdogans-2023-target_241448.html).

<sup>26</sup> Seyfettin Gursel, ‘AK Party's 2023 vision’, Today's Zaman, 4 October 2012, <http://www.todayszaman.com/columnist-294315-ak-partys-2023-vision.html>.

It has been argued that few countries manage to achieve growth rates of eight per cent on a durable basis. As reported by a commission of 19 political leaders and academics from around the world tasked with identifying important insights on policy levers to help countries achieve high, sustainable and inclusive growth, economies confined to a model based on private consumption rarely witness consistently high growth rates.<sup>27</sup> Turkey, where private consumption accounts for 70 per cent of national income, typifies such an economy.

Turkey is categorized as an “upper-middle-income” country by the World Bank, defined as having per capita income between \$4,126 and \$12,745<sup>28</sup>; in 2013, its GDP per capita growth rate was 2.83 per cent.<sup>29</sup>

In the case of Turkey, the risks of restrained growth rates are real and substantial. It needed 55 years to escape its low-income status<sup>30</sup>, which is comparatively much easier than achieving the transition from middle-income to high-income status. Turkey has so far experienced only the “easy” growth derived from macroeconomic stabilization<sup>31</sup> and can no longer simply rely on low-cost labor resources and the easy adoption of new technology as source of growth.

Figure 3 indicates that during the last decade Turkey’s economy has experienced two episodes of sharp recession followed by a booming recovery and a subsequent period of prolonged deceleration: in 2002-07 and 2008-12. These exemplify an economy hovering between stagnation and a

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<sup>27</sup> Commission on Growth and Development, ‘The Growth Report: Strategies for Sustained Growth and Inclusive Development’, World Bank, 2008, [http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1338997241035/Growth\\_Commission\\_Final\\_Report.pdf](http://siteresources.worldbank.org/EXTPREMNET/Resources/489960-1338997241035/Growth_Commission_Final_Report.pdf).

<sup>28</sup> The World Bank, [http://data.worldbank.org/about/country-and-lending-groups#Upper\\_middle\\_income](http://data.worldbank.org/about/country-and-lending-groups#Upper_middle_income).

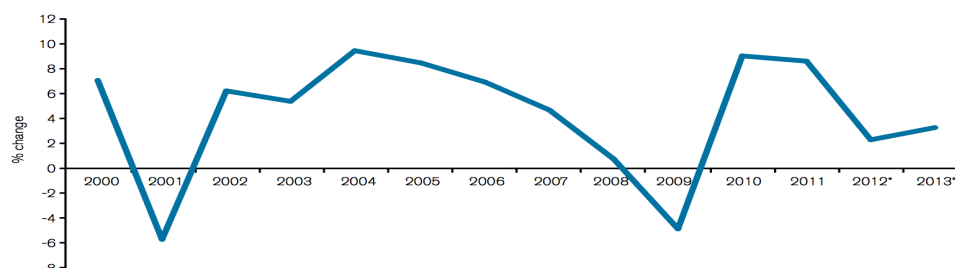
<sup>29</sup> The World Bank, <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>.

<sup>30</sup> Hakan Tasci, ‘The real challenge for the Turkish economy’, Today’s Zaman, 22 May 2012, <http://www.todayszaman.com/columnist-281105-the-real-challenge-for-the-turkish-economy.html>.

<sup>31</sup> Willem H. Buiter, ‘It’s a long way to Copenhagen’, CEPS Policy Briefs, 1 March 2006, <http://www.ceps.eu/book/its-long-way-copenhagen>.

solid growth cycle, where domestic demand cannot sustain growth and employment indefinitely.<sup>32</sup>

*Figure 3: Turkey's GDP 2000-13, Constant Prices*



Source: IMF, 2012 World Economic Outlook

Turkey's consumption-based economic paradigm has several characteristics that undermine growth: low investment and saving rates, limited sophistication of exports, pervasive gender inequality and inefficient use of its "demographic dividend".

However, it must be noted that the current political discourse in Turkey is becomingly less vocal of the 2023 targets. The geo-political risks in the region signs of the ending of quantitative easing by the FED, fragile EU demand combined with political uncertainties within make the targets less attainable.

Indeed a more in depth document that clearly identifies Turkey's problems and necessary actions is the 10<sup>th</sup> National Development Plan. As an overarching goal, the plan envisages a growth strategy focused on improved competitiveness via increasing the overall TFP of the economy by improving the quality of regulatory framework regarding both the financial and private sectors. Variations on two dimensions are underlined throughout the report. There is a gap of TFP between large firms and SMEs and as well

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<sup>32</sup> Cevdet Akcay and Murat Ucer, 'A Narrative on the Turkish Current Account', International Journal of Trade and Diplomacy, Vol. 2, Winter 2008, [https://www.simmons.edu/academics/undergraduate/east-asian/docs/Ogus\\_Binatli\\_and\\_Sohrabji-JITD\\_paper.pdf](https://www.simmons.edu/academics/undergraduate/east-asian/docs/Ogus_Binatli_and_Sohrabji-JITD_paper.pdf).

as a high regional variation. In order to reach the targets put forward for the centennial of the Republic, existing gaps in both dimensions need to be bridged. An overall TFP increase of 1.1 percent is envisaged throughout the planning period.

The Plan draws from a holistic approach to competitiveness. For the economy to thrive as a whole, institutional capacity needs to be upgraded both at the firm level and at the macro level. At the firm level, governance, life-span (survival rate), productivity and lack of scale are the issues that are being considered. On the macro side, transparency, accountability and the rule of law need to be strengthened.

On the other hand, fighting against informality and corruption, protecting intellectual property and patent rights, ensuring predictability and consistency of tax law, will follow.

The Plan is well aligned with the challenges that the Turkish economy is facing today as described below. However, the success in implementation is yet to be seen.

### **1.3.1 Domestic investments and savings**

Generally sustainable growth requires national investment rates of 25 per cent of GDP or above, counting both public and private expenditure. Between 2000 and 2010 Turkey's rate fluctuated between 15 per cent and 22 per cent of GDP, exceeding 20 percent only four years between this time period.<sup>33</sup>

In addition, Turkey misallocated investment expenditures from manufacturing towards residential uses and other non-productive sectors in the post 1980s period; and this was accompanied by the fact that public and private investment no longer complemented each other.<sup>34</sup>

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<sup>33</sup> The World Bank, <http://data.worldbank.org/indicator/NE.GDI.TOTL.ZS>.

<sup>34</sup> Sumru Altug and Unal Zenginobuz, 'What has been the Role of Investment in Turkey's Growth Performance?', Bogazicy University, February 2009, [http://www.econ.boun.edu.tr/public\\_html/RePEc/pdf/200902.pdf](http://www.econ.boun.edu.tr/public_html/RePEc/pdf/200902.pdf).

Istanbul's skyline testifies to this dash for concrete, which triggered the recent protests over redevelopment plans for Gezi Park adjoining Taksim Square, one of few remaining green spaces in Istanbul; TL 7.5 billion (\$4.6) had been appropriated for urban renewal projects in the city for 2012 alone.<sup>35</sup>

High-growth economies need to set aside a considerable share of their income as savings, with a national savings rate of at least 20-25 per cent of GDP, to fund domestic investment needs. Turkey's savings rate, on the other hand decreased from over 23 per cent in the 1990s to 12.7 percent in 2010, the lowest rate since 1980.<sup>36</sup> The main problem is the declining household savings, which more than offset the increase in savings that would normally be associated with rising incomes. This is due to post-crisis credit growth, falling interest rates, rising house prices, pent-up consumption and the increase in the middle classes' share of consumption.<sup>37</sup> As the economy recovered, this reduced the need for "precautionary savings" (i.e. money saved to guard against the uncertainty of future income).

Unsurprisingly, the ratio of household liabilities to disposable income has grown from 4.7 per cent in 2002 to 50.6 percent in 2013.<sup>38</sup> This may indicate the increasing likelihood of a financial crisis in the near future that will be worsen by the steady rise in the share of consumer credit in the budgets for the lower- and middle-income households and by declining rates

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<sup>35</sup> Constanze Letsch, 'Istanbul sees history razed in the name of regeneration', Guardian, 1 March 2012, <http://www.guardian.co.uk/world/2012/mar/01/istanbul-city-urban-renewal>.

<sup>36</sup> The World Bank and Turkey's Ministry of Development, 'Sustaining High Growth: The Role of Domestic Saving', Turkey Country Economic Memorandum; Synthesis Report (Conference Edition), 14 March 2012, [http://siteresources.worldbank.org/TURKEYEXTN/Resources/361711-1331638027014/CEM\\_DomesticSavings\\_fulltext.pdf](http://siteresources.worldbank.org/TURKEYEXTN/Resources/361711-1331638027014/CEM_DomesticSavings_fulltext.pdf).

<sup>37</sup> Murat Ucer and Caroline Van Rijckeghem, 'The Evolution and Determinants of the Turkish Private Saving Rate: What Lessons for Policy?' ERF Research Report Series No. 09-01, February 2009, <http://eaf.ku.edu.tr/sites/eaf.ku.edu.tr/files/rr09-02.pdf>.

<sup>38</sup> Emre Deliveli, 'Macroeconomics 101 for journalists confused by Finance Ministers', Hurriyet Daily News, 24 June 2013, <http://www.hurriyetdailynews.com/macroeconomics-101-for-journalists-confused-by-finance-ministers.aspx?pageID=449&nID=49321&NewsCatID=430>.

of home ownership for the median group of households which constitute the backbone of the labor force.<sup>39</sup>

At 51 per cent of GDP, Turkey's net external debt is among the highest for emerging markets, driven mainly by a surge of private-sector borrowing.<sup>40</sup> Turkey is in a vicious circle: economic growth drives investment needs that cannot be satisfied by domestic savings,<sup>41</sup> which causes addiction to footloose speculative financial flows to finance its current account deficit (CAD), where national investments exceed national savings.<sup>42</sup>

Turkey's persistent CAD is driven primarily by structural, as opposed to cyclical, factors: a low external savings rate, trade composition, and a heavy dependency on imports of energy, intermediate and capital goods in relation to Turkish exports and manufacturing industry.<sup>43</sup> Reliance on an overvalued lira to control inflation, the inflation differential relative to other currencies and the excessive importance of intermediate imports mean economic growth hurts the supply of exports and trade balances.<sup>44</sup>

Since Turkey's export and import growth tend to move concomitantly, the CAD cannot be effectively dealt with by depreciation of the lira alone. Thus the foreign trade and current account deficits are not necessarily "sustainable" without slower economic growth and a contraction of

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<sup>39</sup> Alper Duman, 'Household Debt in Turkey: The Critical Threshold for the Next Crisis', Izmir University of Economics, Prepared for ECOMOD 2013, April 2013, <http://www.ecomod.net/system/files/HouseholdDebtinTurkeyAlperDuman.pdf>.

<sup>40</sup> Benjamin Harvey and Taylan Bilgic, 'Erdogan's IMF Triumph Masks Surge in Private Debt: Turkey Credit', Bloomberg, 14 May 2013, <http://www.bloomberg.com/news/2013-05-13/erdogan-s-imf-triumph-masks-surge-in-private-debt-turkey-credit.html>.

<sup>41</sup> Fazıl Kayıkcı, 'Discussion on Sustainability of Current Account Deficits in Turkey', International Research Journal of Finance and Economics, Issue 74, 2011, [http://www.eurojournals.com/IRJFE\\_74\\_08.pdf](http://www.eurojournals.com/IRJFE_74_08.pdf).

<sup>42</sup> 'Istanbuls and bears', The Economist, 7 April 2012, <http://www.economist.com/node/21552216>.

<sup>43</sup> Mary Stokes and David Rogovic, 'Mind the (Current Account) Gap in Turkey', Forbes, 25 August 2010, <http://www.forbes.com/2010/08/25/turkey-deficit-economy-opinions-columnists-doctor-doom.html>.

<sup>44</sup> Yasar Vural and Mahmut Zortuk, 'Foreign Direct Investment as a Determining Factor in Turkey's Export Performance', Eurasian Journal of Business and Economics, Vol. 4, No. 7, 2011, <http://www.ejbe.org/EJBE2011Vol04No07p13VURAL-ZORTUK.pdf>.



domestic consumption, thereby leaving it less vulnerable to the rups of international financial flows.<sup>45</sup>

Considering the argument that sustainable high economic growth precedes higher savings, government policy need to focus on removing impediments to growth and reducing the vulnerability resulting from low savings during the transition period.<sup>46</sup>

### **1.3.2 Limited sophistication of exports**

A recent IMF paper constructed indices for countries' "sophistication of exports", as measured by the average income and productivity level associated with all their exports. This demonstrates that increasing the sophistication of exports of goods and services can be an important contributor to overall economic growth. More sophisticated sectors not only create more value-added activities but also act as "engines of growth", as they generate spillover effects for the whole economy.<sup>47</sup>

Turkey has not yet been able to increase its export sophistication as China and India have done. It has specialized in stagnant sectors whose share of global trade has been declining and is generally more competitive in goods with lower relative prices, where minimizing costs is the strategic issue.<sup>48</sup> High-tech exports (products with high research and development intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments and

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<sup>45</sup> Aysu Insel and Fazıl Kayıkcı, 'Evaluation of Sustainability of Current Account Deficits in Turkey', *Modern Economy*, Vol. 3, No. 1, January 2012, <http://www.scirp.org/Journal/PaperInformation.aspx?paperID=16805>.

<sup>46</sup> Eser Pirgan Matur, Ali Sabuncu and Sema Bahceci, 'Determinants of Private Savings and Interaction Between Public and Private Savings in Turkey', *Topics in Middle Eastern and African Economies*, Vol. 14, September 2012, [http://www.luc.edu/orgs/meea/volume14/PDFS/Saving%20study\\_V\\_eas7\\_1.pdf](http://www.luc.edu/orgs/meea/volume14/PDFS/Saving%20study_V_eas7_1.pdf).

<sup>47</sup> Rahul Anand, Saurabh Mishra and Nikola Spatafora, 'Structural Transformation and the Sophistication of Production'. IMF Working Paper, WP/12/59, February 2012, <http://www.imf.org/external/pubs/ft/wp/2012/wp1259.pdf>.

<sup>48</sup> Erol Taymaz, Ebru Voyvoda and Kamil Yılmaz, 'The Transformation of International Production Linkages and Turkey', Koc University – TUSIAD Economic Research Forum, Yayın No. EAF-RP/11-01, December 2011, [http://eaf.ku.edu.tr/sites/eaf.ku.edu.tr/files/eaf\\_rp\\_1101.pdf](http://eaf.ku.edu.tr/sites/eaf.ku.edu.tr/files/eaf_rp_1101.pdf).

electrical machinery) have accounted for just two per cent of total manufactured goods exports on a consistent basis since 2002.<sup>49</sup>

Some important reforms have recently been implemented, thereby demonstrating the government's willingness to translate its intentions into actual deeds. In this respect, it is particularly significant the entry into force of the Turkish Commercial Code in July 2012. The new legislation contains a series of measures making trade practices more transparent and providing some specific obligations for companies.<sup>50</sup>

In summer 2012, the Turkish authorities issued a decree on incentives for foreign investment, in order to reduce the development gap among the various areas of the country, promote the creation of industrial districts on the Italian model and encourage the production of high technology goods. To this end, the decree provided some incentives whose intensity is related to the geographic areas where companies want to invest, the type of investment and the business sector.<sup>51</sup>

Furthermore, the wide privatization plan started by the government in the mid-Eighties has been providing the Treasury with huge resources and helping to make the economy more competitive and dynamic. The state left some important sectors and began to divest its shares in other sectors, such as tourism, iron and steel.

The good performances of the Turkish economy did not overcome the skepticism of some international analysts who see the danger of a new crisis on the horizon for the Anatolian country. These worries come from the structural weaknesses of Turkey, like the large current account deficit. The government is trying to reduce this imbalance, by fostering the attraction of

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<sup>49</sup> The World Bank, <http://data.worldbank.org/indicator/TX.VAL.TECH.MF.ZS>.

<sup>50</sup> Caleb Lauer: 'Turkey's New Commercial Code to have Broad Impact on M&A', Financial Times, 5 March 2012, <http://www.ft.com/intl/cms/s/2/c2c45400-6711-11e1-9e53-00144feabdc0.html#axzz3XyByobYl>.

<sup>51</sup> Ambasciata d'Italia in Ankara, Ufficio Commerciale (2012) Cronache Economiche n.20. [http://www.ambankara.esteri.it/Ambasciata\\_Ankara](http://www.ambankara.esteri.it/Ambasciata_Ankara).

foreign investment and supporting exports, especially high added value goods.

Turkey has always been considered an ideal production base, thanks to its strategic geographical location, the high specialization and low cost of its labor force and its wide range of incentives. For these reasons, businesses from all over the world invested and continue investing hugely in the country, with production activities in all sectors.

### **1.3.3 Pervasive gender inequality**

Female emancipation is a critical driver of economic growth, robust democratic pluralism, and a state's security and stability.<sup>52</sup> Given the status of women in Turkey, therefore, the probability of maximizing economic affluence is more challenging.

Turkish women live in a socially conservative society in which they face significant restrictions. According to the United Nations Development Program (UNDP) and the World Economic Forum (WEF), respectively, Turkey is positioned 101<sup>st</sup> out of 109 countries for gender empowerment<sup>53</sup> and 122<sup>nd</sup> out of 135 for gender equality.<sup>54</sup> At 31.2 per cent, its female labor force participation rate, it is less than half the average of 60 per cent for the OECD.<sup>55</sup> Social conservatism acts as one of the chief barriers to female employment, together with the lack of job opportunities for women in urban environments, the decline in agricultural employment, poor education of women, lack of childcare services and inadequate working conditions (Ernst & Young, 2013).

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<sup>52</sup> M. Hudson, 'What Sex Means for World Peace', Foreign Policy, 24 April 2012, [http://www.foreignpolicy.com/articles/2012/04/24/what\\_sex\\_means\\_for\\_world\\_peace](http://www.foreignpolicy.com/articles/2012/04/24/what_sex_means_for_world_peace).

<sup>53</sup> UNDP, "New Horizons: UNDP Turkish Monthly Newsletter".

<sup>54</sup> Ricardo Hausmann, Laura D. Tyson and Saadia Zahidi, 'The Global Gender Gap 2011: Rankings and Scores', World Economic Forum, 2011, [http://www3.weforum.org/docs/GGGR11/GGGR11\\_Rankings-Scores.pdf](http://www3.weforum.org/docs/GGGR11/GGGR11_Rankings-Scores.pdf).

<sup>55</sup> Gokce Uysal, 'More Women are Working', BETAM, Research Brief 12/134, 26 July 2012, <http://betam.bahcesehir.edu.tr/en/wp-content/uploads/2012/07/ResearchBrief137.pdf>.

Excluding women from the labor force is costly. Assuming a 50 per cent female labor force participation rate achieving the average level of productivity (\$30,000 value added per worker per annum), Turkey's annual economic loss amounts to \$419 billion. This is greater than the economy's GDP gains over the last ten years.<sup>56</sup> It means that this feature especially plays a crucial role in the growth of the Turkish's economy and, if not undervalued, it could make this country more competitive within the other big economies.

#### **1.3.4 Inefficient use of demographic dividend**

Turkey's youthful population (the median age is 29.2 years<sup>57</sup>) has been a source of vitality for the economy. The country is going through the "demographic window of opportunity", where the proportion of the working-age population (those between 15 and 64) is bulging, while the proportion of the "inactive" youth (below 15 years) and the elderly (65 years and above) is shrinking. This translates into reductions of expenditure on education and social security, and rising tax revenues.<sup>58</sup>

Turkey is heavily dependent, therefore, on favorable demographics and structural change – the transfer of workers from low- to higher-productivity sectors – for labor productivity growth.

Yet, Turkey cannot rely indefinitely on the demographic dividend, which normally happens only once and lasts around 50 years. Moreover, its benefits can be wasted without proper education and employment policies. Based on UN estimates, Turkey's demographic window of opportunity will begin to close in 2025.<sup>59</sup> After about 2015, Turkey's dependency ratio (i.e.

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<sup>56</sup> Esen Caglar made the calculation based on a female labor force participation of 24 per cent. 'The annual cost of keeping women at home is \$574 billion' TEPAV Articles, 2 April 2012, <http://www.tepav.org.tr/en/kose-yazisi-tepav/s/3165>.

<sup>57</sup> CIA, World Factbook, 2013, <https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html>

<sup>58</sup> Euromonitor International, 24 January 2012, 'Turkey's Population Young and Rapidly expanding', <http://blog.euromonitor.com/2012/01/turkeys-population-young-and-rapidly-expanding.html>.

<sup>59</sup> United Nations Children's Fund (UNICEF), 'Children in the Population', <http://www.unicef.org.tr/en/content/detail/53/children-in-the-population.html>.

between those in the labor force and those outside it) is expected to rise again as the population starts ageing. This will incur an intergenerational transition of resources from education to social security, healthcare and pension provision for the elderly.

Erdogan viewed the drop in fertility as a threat to national security. He has exhorted women to have three children, and condemned Caesarean births and abortions. He was particularly apprehensive that the Kurdish community could be a majority in Turkey in 2038 since the average birth rate for Kurdish women is more than double the national rate for Turkish mothers.<sup>60</sup>

Nevertheless, Erdogan's focus of concern seems misguided. The central risk is that procrastination on economic and social reforms is coinciding with the fast approaching demographic reversal, due in less than a generation. According to a 2012 study by Turkish Statistical Institute, the share of the population made up of children aged up to 17 years had dropped from 41.8 per cent in 1990 to 30 per cent by 2012 and is set tumble further to 25.7 per cent by 2023, 19.1 per cent by 2050 and 17.6 per cent by 2075.<sup>61</sup> Turkey cannot rely forever on the power of demography to propel productivity and economic growth.

### **1.3.5 Looking for some Solutions**

As mentioned above, Turkey has managed to achieve significant growth since the liberalization movement of the early 1980s. Rapid urbanization and movement of labor from less productive agriculture to services and manufacturing helped Turkey to boost its productivity. Entering into the European Union Customs Union not only help Turkey integrate into the global economy but also helped improve the competitiveness of its firms in

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<sup>60</sup> Palash R. Ghosh, 'Turkey: high Kurdish birth rate raises questions about future', International Business Times, 16 May 2012, <http://www.ibtimes.com/articles/341685/20120516/turkey-kurds-demographics-birth-rate-erdogan-babies.htm?page=all>.

<sup>61</sup> Turkish Statistical Institute (TUIK), 'Statistics on Child, 2012', <http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=13488>.

an open market. This process was followed by the macroeconomic stabilization of early 2000s and then with the reforms induced by the start of the EU accession process. All these factors contributed to the rapid growth in GDP per capita.

With a per capita income of about \$10,000, Turkey's main economic challenge in the coming years is to avoid the so-called 'middle-income trap'. As shown by Eichengreen, Park and Shin, middle-income traps tend to happen when it is no longer possible to boost productivity by shifting additional workers from agriculture to industry and total factor productivity (TFP) growth from other sources does not take up the slack. The Turkish Government in its 10th Development Plan also recognizes the middle-income trap phenomenon. The plan envisages a growth strategy focused on improved competitiveness via increasing the overall TFP of the economy by improving the quality of regulatory framework regarding both the financial and private sectors.

Turkey has nearly exhausted its potential in terms of between-sector productivity increase. It needs to look for new sources of productivity growth that will ensure the sustainability of its SMEs and ultimately enable more of them to internationalize both through FDI attraction and exports.

Turkey has normally prescribed a list of economic reforms to advance its economy beyond middle-income status. This list looks daunting and endless, thereby generating anxiety and reform "fatigue" in the government. Prioritizing the reform agenda is probably a more constructive approach. This means tackling the two main bottlenecks to growth: quality of human capital and incomplete reform of governance and institutions.

The quality of human capital in terms of education and training remains a major constraint on growth and innovation in Turkey.<sup>62</sup> The sophistication of exports has been linked with productivity, and productivity with human

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<sup>62</sup> Izak Atiyas and Ozan Bakis, 'Constraints on Growth in Turkey: A Prioritization Study', TUSIAD Yayın No -T/2011/11/519, November 2011, [http://www.tusiad.org.tr/\\_rsc/shared/file/Rapor-TRdeBuyumeninKisitlari.pdf](http://www.tusiad.org.tr/_rsc/shared/file/Rapor-TRdeBuyumeninKisitlari.pdf).

capital. Ultimately, high educational quality is a fundamental plank of a competitive economy.<sup>63</sup>

Turkey stands 32<sup>nd</sup> among 34 OECD members and 40 per cent of Turkish 15-year-old students do not achieve a basic level of competence in mathematical literacy but with an average improvement of more than 2.5 points per year since 2003.<sup>64</sup>

Turkey is also ranked 90<sup>th</sup> out of 187 countries by the UNDP in terms of average duration of education for 25-year-olds. In addition, the WEF ranked Turkey respectively 63<sup>rd</sup>, 74<sup>th</sup>, and 124<sup>th</sup> out of 144 countries in terms of primary education and healthcare, higher education and training, and labor market efficiency.<sup>65</sup>

Access to education is problematic as only 33% of adults between the ages of 25-64 have the equivalent of a high school degree compared to the OECD average of 74%.<sup>66</sup>

According to a recent survey of 10,174 young people aged 15-29 across Turkey, most respondents did not speak a foreign language; only one in ten had travelled abroad; one-third did not read newspapers; the most popular activity was watching television, and ultra-nationalist soap operas received top ratings.<sup>67</sup>

Education issues further affect Turkey's economic prospects indirectly through their impact on "interpersonal trust" throughout the country's human capital. Such levels of mistrust are deeply damaging to Turkey's "social capital" and human capital and, by extension, its economic growth. The European Commission has concluded that Turkey is the least

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<sup>63</sup> Ozan Acar, 'Competitiveness Assessment of PISA results for Turkey', TEPAV, 19 February 2008, [http://www.tepav.org.tr/upload/files/1271251457r2163.PISA\\_Sonuclari\\_Isiginda\\_Turkiye\\_nin\\_Rekabet\\_Gucunun\\_Degerlendirilmesi.pdf](http://www.tepav.org.tr/upload/files/1271251457r2163.PISA_Sonuclari_Isiginda_Turkiye_nin_Rekabet_Gucunun_Degerlendirilmesi.pdf).

<sup>64</sup> OECD (2012), <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-I.pdf>.

<sup>65</sup> World Economic Forum, Global Competitiveness Report 2012–2013, 2012, [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2012-13.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf).

<sup>66</sup> Heinrich Boll Stiftung (2015), 'A Commentary on Turkey's Growth Strategy'.

<sup>67</sup> Burak Bekdil, 'The Turkish ideal, too, is youth', Hurriyet Daily News, 14 March 2012, <http://www.hurriyetdailynews.com/the-turkish-ideal-too-is-youth.aspx?pageID=238&nID=15943&NewsCatID=398>.

innovative economy in Europe and this is the most important contributor to the income gap between Turkey and the EU.<sup>68</sup>

Through better education, another problem could be tackled: informal employment. The percentage of workers in the informal sector is quite high: 36.7% in 2013 (Hoffman & Alexander, 2015). Reforms to improve educational outcomes are essential to further narrow the income gap vis-à-vis higher-income countries. Encouraging formal employment is key to unleash the growth potential. This can be achieved by reducing labor costs, reforming employment protection and by raising incentives to work longer in the formal sector.

Relatively high minimum costs of labor for employers discourage the hiring of low-skilled workers in the formal sector. The OECD recommendation would be to make permanent the cuts granted during the crisis and further reduce social security contributions for low skilled workers throughout the country, financing this by a widening of the tax-based. Also, Turkey should limit the growth of the official minimum wage and promote minimum wage settlement at regional level through local consultations between government, employer and employee representatives.<sup>69</sup>

In Turkey, the pensionable age is 47, which creates disincentives to continue formal sector work at older ages, as the phasing in of the pension reform is only very gradual; no actions have been taken since the strategy to combat the Informal Economy 2012-2013.

In order to achieve a higher employment rate, Turkey's growth strategy aims for a competitive market environment to attract investments and increase the rates of employment and productivity and, thereby growth. For this reason, Turkey will launch negotiations for at least ten Free Trade Agreements (FTAs) by 2018 (Hoffman & Alexander, 2015). Statistics show that total exports are higher with FTA than non-FTA trade partners. At the

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<sup>68</sup> The World Bank, 'Turkey Investment Climate Assessment. Vol. II, 8 November 2007, [http://www.yoikk.gov.tr/dosya/up/eng/ICA%20Volume\\_II.pdf](http://www.yoikk.gov.tr/dosya/up/eng/ICA%20Volume_II.pdf).

<sup>69</sup> OECD (2015), 'Going for Growth: Economic Policy Reforms'.



same time, however, the value of domestic content is high, but falling. Therefore, FTAs and Global Value Chains (GVCs) may not always benefit Turkish workers.

Another major obstacle to sustainable growth is the weakness of governance and institutions. Turkish society is seen as tolerant of unequal distributions of power and inclined to low levels of individual rights. These features are generally associated with countries where growth rates are volatile current account deficits are persistent and the momentum for reform is rarely robust even in the presence of positive macroeconomic indicators.<sup>70</sup> In Turkey, the concentration of political power in the hands of a few individuals tends to undermine state institutions and does not encourage an enduring stable political environment for reform. In August 2011, for example, the government abruptly restricted much of the independence of the public procurement regulator and eight other market regulatory bodies.<sup>71</sup> Unsurprisingly, Turkey is ranked only 64th out of 144 countries in terms of the efficiency and transparency of its public institutions, according to the WEF.<sup>72</sup> The EU accession process has been the principal driver for reforms; naturally, the fruits of long-term reform initiatives, such as upgrading the rule of law or transforming the education system and vocational training programs, require focused government attention and do not conform to the short timelines of electoral politics; but they are essential to propel the Turkish economy forward.

#### **1.4 SMEs**

Small and medium enterprises are the backbone of the business system in Turkey and one of the key factors of development (Arcuri, 2013), therefore

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<sup>70</sup> Geert Hofstede, Gert Jan Hofstede and Michael Minkov, 'Culture and Organizations: Software of the Mind' (McGraw Hill, 3rd edn, 2010).

<sup>71</sup> Cengiz Aktar, 'Development at any cost', Today's Zaman, 13 June 2012, <http://www.todayszaman.com/columnist-283463-development--at-any-cost.html>.

<sup>72</sup> World Economic Forum, Global Competitiveness Report 2012–2013.

any attempt to understand the Turkish economic reality cannot leave SMEs out of consideration.

They represent more than 99 % of all enterprises and absorb the main part of the labor force employed in the business sector (European Commission, 2014). These data put Turkey in line with the EU countries, but Turkish small and medium enterprises are smaller than the European ones by number of employees. The number of Turkish SMEs grew considerably in the last years, as well as their contribution to the gross domestic product and employment.

Education played an important role in this expansion process, through specific initiatives aimed at spreading the entrepreneurial culture and providing practical information to start and manage business activities. Several institutions, such as the Organization for the Development of Small and Medium Enterprises (KOSGEB), the Turkish Employment Agency (ISKUR) and chambers of commerce made great efforts on the educational front and addressed a very wide audience, including students, unemployed and various categories of entrepreneurs (OECD, 2013).

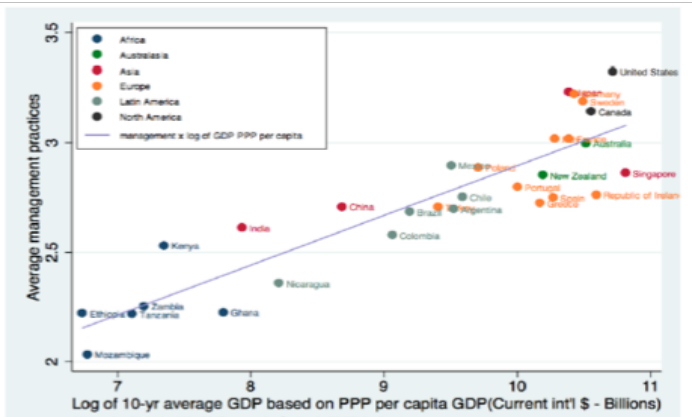
Despite the progress made, Turkish SMEs still stand below the EU average for innovation level, as showed by specific studies of the European Commission aimed at understanding how companies meet a number of parameters, such as the introduction of product or process innovations and the number of online purchases and sales. To fill this gap, KOSGEB developed a support model acting on some cost items related to research and development, in accordance with the general objective of the government to make innovation a driver of the economic growth.

Turkish firms need upgrading on multiple facets. In fact, the World Bank carried out a Management Survey designed by economists from the London School of Economics (LSE). The World Management Survey (WMS) started 10 years ago to systematically measure the quality of management practices across countries and sectors. LSE have surveyed over 30 countries, including Turkey. The WMS gets at what is actually happening at the plant

of the enterprise, rather than how the impressions of manager or what managers may think is taking place.

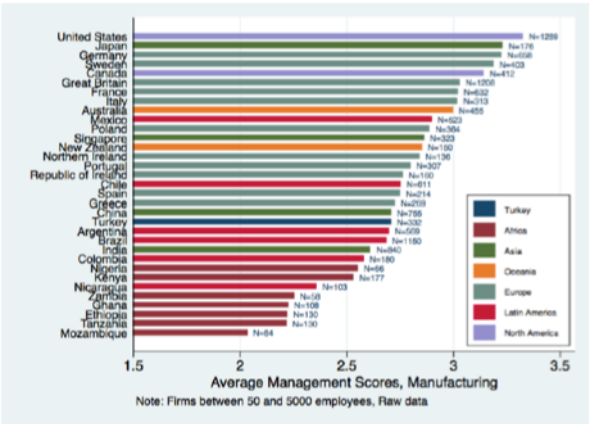
Preliminary findings of the survey suggest that Turkey is an underperformer in terms of management quality. Figure 4-a below illustrates the relationship between a country's average management quality and its level of development and figure 4-b shows how Turkey ranks with respect to other surveyed countries.

Figure 4a: Relationship between Country's Average Management Quality and GDP per capita



Source: April 2013, World Economic Outlook (IMF) indicator

Figure 4b: Ranking of Countries' Management Quality



Source: April 2013, World Economic Outlook (IMF) indicator

Turkish small and medium enterprises lag behind European competitors also in the field of internationalization. It is well known that Turkey has an urgent need to increase its exports, so it is essential for it to provide companies, especially the smallest ones, with the necessary tools to start operating or to expand into foreign markets. Internationalization, in general, and FDI in particular are associated with more innovation, better management, and higher productivity. Particularly in Turkey companies with foreign ownership and foreign companies act as the driver of innovation across the economy.

To this end, the Turkish Export Promotion Centre (IGEME), headed by the Under secretariat of Foreign Trade, launched a program helping small and medium enterprises internationalize themselves through training and counseling activities and financial aid.<sup>73</sup>

Many of the initiatives in support of Turkish SMEs were boosted by a series of international agreements signed by the government, such as the Bologna Charter on SME Policies, the European Charter for Small Enterprises, the Multiannual Program for Enterprise and Entrepreneurship and the Small Business Act for Europe (SBA). The latter, approved by the European Council in 2008, sets out the guidelines that the EU intends to follow to help SMEs grow and create jobs.<sup>74</sup>

Small and medium enterprises play a very important role in the Turkish economy, both for their huge number, and the large labor force employed. However, they have some weak points, limiting their level of competitiveness. In particular, they are weak in the field of technology, innovation and research and development. Furthermore, they show a limited usage of bank loans, an insufficient credit guarantee system, a low usage of

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<sup>73</sup> International Trade Center, 'Turkey: Better Training for Small Exporters', <http://www.tradeforum.org/Turkey-Better-Training-for-Small-Exporters/>.

<sup>74</sup> European Commission (2012), SBA Fact Sheet 2012- Turkey. [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2012/turkey\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/countries-sheets/2012/turkey_en.pdf).

modern marketing strategies, a lack of consciousness of quality and brand concepts (Arcuri, 2013).

### **1.5 Conclusion**

Robust public finances and a resilient banking sector have supported economic performance. However, with low-domestic saving and volatile external competitiveness, growth is highly dependent on domestic demand and foreign finance.

External demand is strengthening, in particular in a context of recovery in the European Union, but high inflation, exchange rate volatility and low productivity growth endure. Competitiveness remains fragile and dependence on foreign saving is very high. Monetary and financial policies aim at disinflation while keeping the exchange rate and credit growth on a sustainable path, but inflation is well above target and private debt levels have risen substantially, even though from a low level. Credit to SMEs and foreign currency borrowing by large firms have both expanded rapidly, which may increase financial risks. However, the authorities have increased their efforts to keep household debt in check and so far, household and commercial loan default rates have remained low. To help rebalance demand, further improvements in external competitiveness are indispensable. In this regard curbing inflation is essential, calling for a restrictive monetary policy stance.

While the overall fiscal position appears robust, public spending has increased considerably, in particular for education, health and pensions. Demographic trends, active policies and large infrastructure projects will put additional pressure on public spending.

Despite government incentives to promote formal businesses and investment in selected regions and sectors, resources don't flow enough from lower to higher-productivity activities. All these factors inhibit productivity growth and establish a social divide between the earnings,

work conditions and human capital development prospects of workers in different segments of the business sector. Stronger trust in a rule-based business environment would encourage faster growth of foreign direct investment firms, which would contribute to productivity gains, inclusive growth and non-debt creating absorption of foreign saving (OECD, Economic Survey: Turkey, 2014).

## **CHAPTER 2**

### **Upgrading the Turkish Firms: Global Value Chains**

#### **2.1 Introduction**

Countries are competitive only if its firms are competitive. As discussed above, Turkish firms achieved significant progress over the last three decades as they upgraded and consequently the exports of the country improved exponentially. In the last decade Turkey continued to increase exports. This increase was achieved via two main channels. First one is the geographical diversification. Turkish firms managed to spread to the MENA region and Africa. However, this diversification came at the cost of decreasing the sophistication of exported products due to the nature of demand in those countries. The other channel was intensive margin meaning that exports grew mainly through already exporting firms. Both channels indicate a problem with the exporting patterns of Turkish firms.

In the remaining of this chapter it is argued that integrating in to global value chains may prove to be a way for Turkish firms to become more competitive and get a bigger share of the global exports.

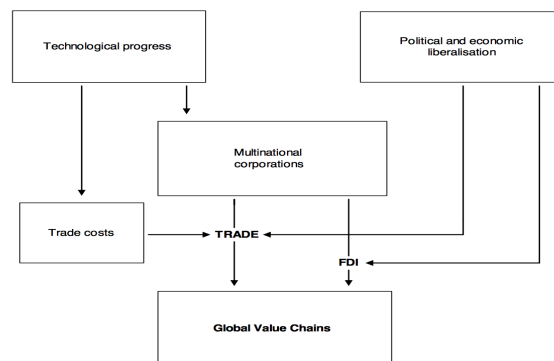
#### **2.2 Drivers of Global Value Chains**

In “value chain world” terms, the idea of a product is perceived in one country, inputs are obtained and produced in others, assembly in another more and lastly, the final product is shipped and marketed around the world. Indeed, the care of the economies is no longer just on importing materials and exporting finished goods, but to add value throughout a multi-economy production chain.

As discussed in Hillberry (2011), it is not easy task to separate the drivers of the increase in international trade from those with a specific impact on the fragmentation of production. Nevertheless, declining transport, information

and communication costs, the sharp increase in technological progress and lower political and economic barriers to trade are pointed out as the main drivers of GVCs in the last two decades. In addition, the liberalization of capital flows has contributed to the expansion of foreign direct investment (FDI) flows, with multinational corporations as key players in operationalizing GVCs (Figure 5).

*Figure 5: Schematic illustration of the main drivers of GVCs*



### 2.2.1 Technological Progress and Trade Costs

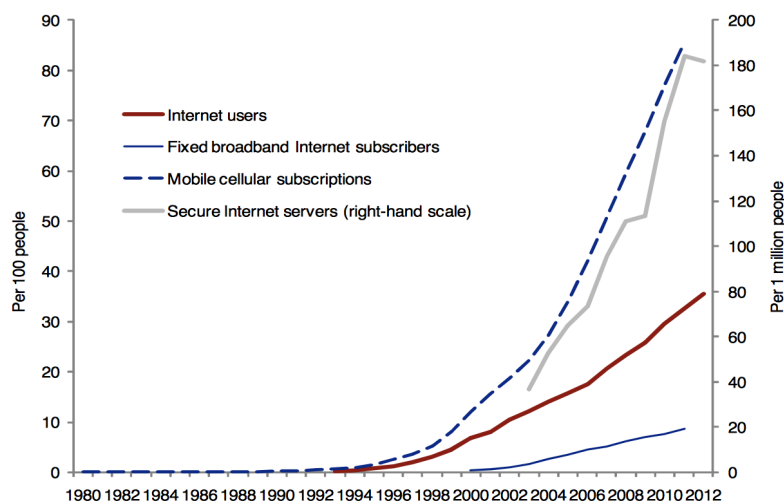
In terms of combining parts and components produced in different locations around the world, technological progress is the only one that can perfectly deal with it.

Moreover, in recent decades, there has been a significant progress in information and communication technology (ICT) and a dramatic fall in telecommunication costs (Figure 6). These are all crucial keys in the coordination of dispersed production activities and in the management of highly complex GVCs. In addition, these transformations have enhanced the development of GVCs in the services sector itself. Amiti and Wei (2005) describe the main world trends in outsourcing of business, computing and information services. The authors show that service outsourcing has been steadily increasing and due to the growth of international exchanges of electronically transmitted business services, sectors like financial, computer



and information services together with other commercial services are increasingly traded internationally.

*Figure 6: World indicators of information and communication technology (ICT)*



Source: World Bank – World Development Indicators (WDI)

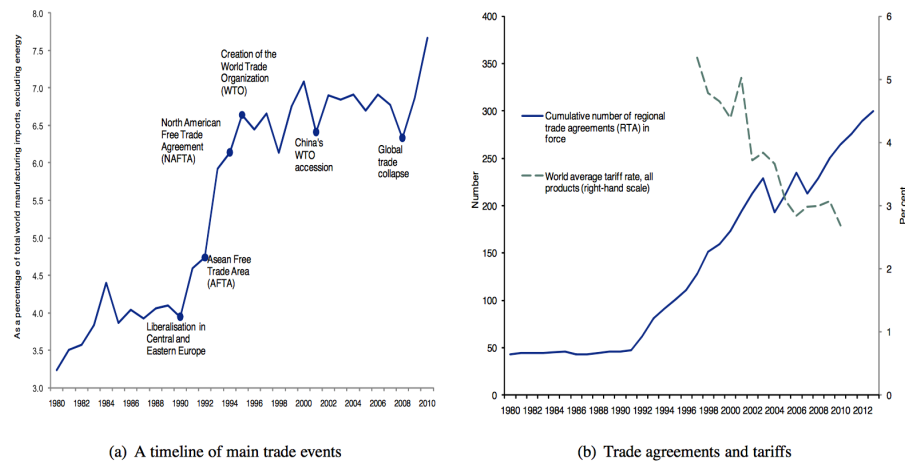
Another key role in the development of GVCs is played by the technical innovations in the transportation technology. As discussed in DFAIT (2011), the growth of GVCs may be less influenced by the costs of transportation in a traditional sense, and more by the increased speed and reliability of transportation, as the maintenance of an efficient international supply of inputs puts a premium on the timeliness of deliveries.

In this context, Hummels & Schaur (2013) study firms' transport choices between the use of air and ocean cargo and conclude that trade in parts and components is time-sensitive. These results suggest a link between the decline in the relative cost of rapid transportation and the growth in worldwide fragmentation of production. As Nordas (2006) examines the relevance of time as a competitive factor, he concludes that effective transport and logistics services, and trade facilitation leading to simpler customs procedures have a positive effect on trade and on the probability of entering an international supply chain.

### 2.2.2 Economic and Trade Liberalization

Beside the technological progress, the fall in both political and economic barriers has also been an important driver of trade (Figure 7).

Figure 7: Global economic and trade liberalization



Sources: World Trade Organization (WTO) for the RTA data, World Bank – World Development Indicators (WDI) for the tariff rate data and authors' calculations.

As discussed in Baldwin (2012), currently supply-chain trade is very regionalized, supported by a combination of regional trade agreements, bilateral investment treaties and unilateral reforms by developing countries, mostly accomplished outside the World Trade Organization (WTO). As a result, the global production network is organized around three major regional blocks in Europe, Asia and in North America.

The enlargement of the European Union (EU) towards Central and Eastern European countries could be seen as one of the causes that led the political and economical liberalization in Europe. This brought economies into the European Common Market and created an intense net of international trade linkages including important GVCs (Amador & Cabral, 2014). As it is shown in the studies of Kaminski and Ng (2005), there has been a shift from simple assembly operations to processing and local production of parts; these network firms, operating through mostly EU-based networks of production and distribution have begun expanding beyond EU markets.

They also concluded that the largest recipients of FDI in the 1990s (Hungary, the Czech Republic and Slovakia) have also experienced the fastest growth in the network trade.

The triggering event that brought to the movement toward trade liberalization was the accession of China to the WTO in 2001. Athukorala (2009) investigated how China's emergence as a major trading nation is affecting the export performance of other East Asian countries, in a context of increased global production sharing. His conclusion was related to China's rapid integration into global production networks as a major assembly center that created new opportunities for the other East Asian countries to engage in various segments of the value chain in line with their comparative advantage.

In general, applied tariffs are low and still decreasing in Asia; the trade on semi-processed products is important because of their tariffs that are the lowest. In addition, some regional trading agreements contributed to increase the regional integration and the development of GVCs in the region. One of the best-known trade agreements is the Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA).

In the modern world economy, one of the most important functions of trade agreements is to provide anchors by which governments can ensure traders and investors that the steps they have taken to liberalize their economies will be permanent. Trade agreements<sup>75</sup>, whether they are negotiated in bilateral, regional, plurilateral, or multilateral configurations, are a means by which the autonomous reforms that countries have already taken are transformed from potentially reversible policy decisions into solemn and enforceable treaty commitments.

Trade agreements can also facilitate the formation of GVCs by aiming for the harmonization of standards. When the costs of regulatory compliance become large enough they can reach a tipping point in which it is no longer

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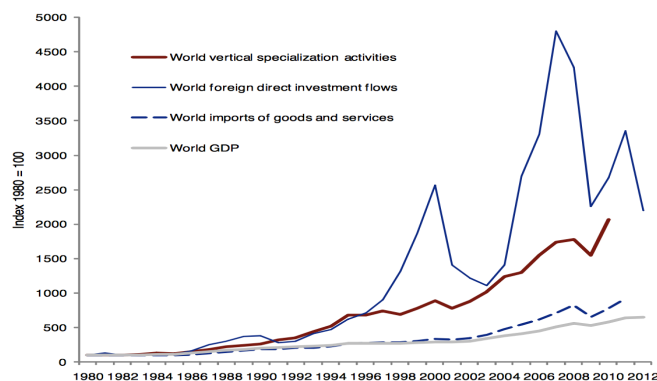
<sup>75</sup> Dominique Bruhn (2014), "Global Value Chains and Deep Preferential Trade Agreements".

profitable to operate a multi-stage GVCs. Thus, harmonization and mutual recognition of standards creates opportunities to reduce trade costs so that firms and consumers can take better advantage of the economies of dispersed international production.<sup>76</sup>

### 2.2.3 FDI Flows

Together with technological progress and the fall in political and economic barriers, as Figure 1 shows, also FDI flows are a driver that leads to the development of GVCs. Liberalization and deregulation contributed to the growth of FDI flows that accelerated since the 90s (Figure 8).

*Figure 8: World vertical specialization activities and FDI flows*

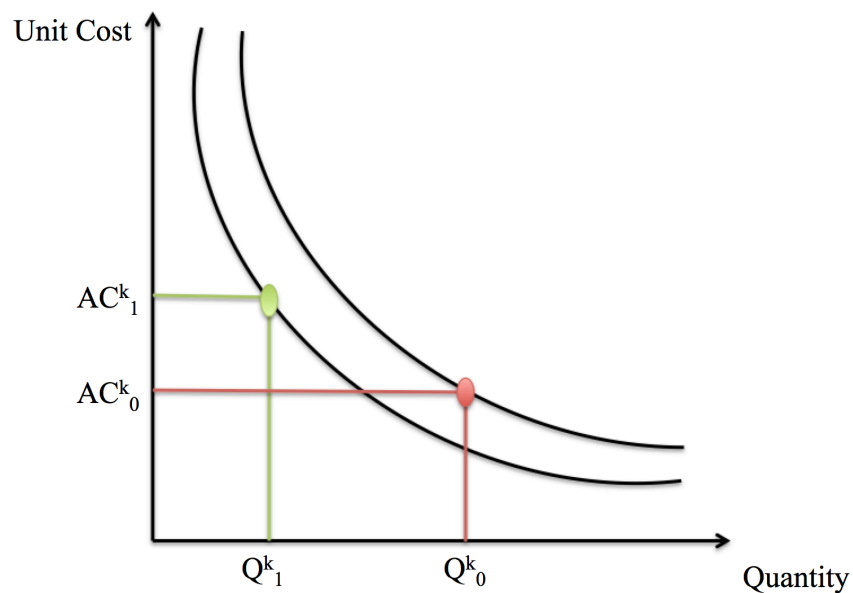


Sources: World Bank – World Development Indicators (WDI) and authors' calculations

Foreign direct investment is a basic building block of GVCs and a large share of global trade within GVCs is undertaken within MNE networks. Before starting the production process, firms will have to take decisions between offshoring parts of the production process and whether to do so through FDI or via arm's-length trade. As multinationals become players in international trade, GVCs are increasingly associated with FDI flows, with subsidiaries providing inputs to their parent firms. Generally, firms locate

<sup>76</sup> Portugal-Perez, A., J.-D. Reyes, and J.S. Wilson (2010), "Beyond the Information Technology Agreement: Harmonization of Standards and Trade in Electronics", *The World Economy*.

production in foreign countries to take advantage of factor-costs differentials in certain stages of production, which are different in factor proportions and geographically separable. FDI can provide a firm with new markets and marketing channels, cheaper production facilities, and access to new technology, products, skills and financing. In the same way, MNEs may have both positive and negative effects on local firms and the empirical studies do not provide a clear resolution because generally it depends on different factors. In the negative side, it can be considered an imperfectly competitive market with fixed costs of production where there are not MNEs: local firms face a downward-sloping average cost curve ( $AC_0$ ).



Firm K produces  $Q^k_0$  at an average cost  $AC^k_0$ . Now imagine the more efficient MNEs enter the market; since their marginal costs are lower, they will produce more than local firms, taking away part of the local demand from them. The average cost curve shifts down to  $AC_1$ . As a consequence of these two combined effects, local firm K will produce less ( $Q^k_1 < Q^k_0$ ) at higher average costs ( $AC^k_1 > AC^k_0$ ), even if positive spillovers have taken place. Sometimes, linkages between MNEs and domestic firms may suffer

as MNEs often develop protective mechanism to prevent their knowledge from spilling over to local competitors, especially in countries where the enforcement of intellectual property rights (IPRs) is weak. Spillovers are not likely to arise in poor technological countries since they don't have enough skills to absorb the modern technologies; spillovers are more likely to arise between firms which are geographically close and when there are vertical linkages between local firms and MNEs.

In the positive side there is the fact that MNEs are among the most important vehicles for technology transfer across countries, including through and forward linkages with local firms, imitation and demonstration effects, as well as movements of workers from multinationals to local firms. It is also true that, local firms often lack the necessary absorptive capacity for the advanced technology and skills of MNEs (Blomstrom & Kokko, 2003).

The production of goods and services is increasingly carried out wherever the necessary skills and materials are available at competitive cost and quality. This fragmentation of production across borders has important implications on trade and investment patterns and policies and offers new prospects for growth, development and jobs especially for undeveloped and developing countries.

### **2.3 Impacts of Global Value Chains**

The drivers of GVCs bring to different effects over multiple dimensions; trade flows, trade in services, employment and wages, and productivity are considered to be the main ones.

As production is nowadays fragmented into different stages, executed in distinct plants, located in different countries, consequently there are more intermediate goods that circulate between countries and this led to the growth of international trade flows. In the process where raw materials are transformed into finished products, goods may cross borders many times

and efficient customs and port procedures are indispensable to the operation of supply chains. When a firm wants to become global, it needs to be able to engage in just-in-time delivery and to have flexibility to respond quickly to demand in order to deal with the global competition. Tariffs still matter but tend to be low, declining, transparent and predictable. In this scenario, where potential investors seek to outsource their production processes, a country that permits and promotes quick and reliable movement on inputs becomes more attractive. Border measures affect the timeliness and cost with which firms can access inputs from abroad and export their products. Hence, reducing import tariffs and export procedures is often a critical step to competitively engage in GVCs. More specifically, in the absence of multilateral reductions in tariffs, developing countries should seek trade agreements on tariffs, tariff escalation and standards harmonization with other developing countries (OECD, WTO, & World Bank, 2014).

While tariffs are no longer as important in most channels of trade as they were once, the intricate structure of GVCs can multiply the effects of even nuisance-level rates of duty. In one example, a disk drive is assembled in Thailand, which acts as a hub for a supply network involving 43 components from ten other countries and ten components produced in Thailand.<sup>77</sup> The disk drive then is sent to China, which serves as a similar hub for the assembly of a laptop computer, which is finally sent to the United States. Koopman et al. (2010) calculated the so-called “tariff-magnification ratios” for manufacturing products and show that taking into account tariffs along all stages of the supply chain raises significantly the effective tariff protection.<sup>78</sup> Indeed, empirical evidence shows that this magnification effect is particularly important in sectors characterized by

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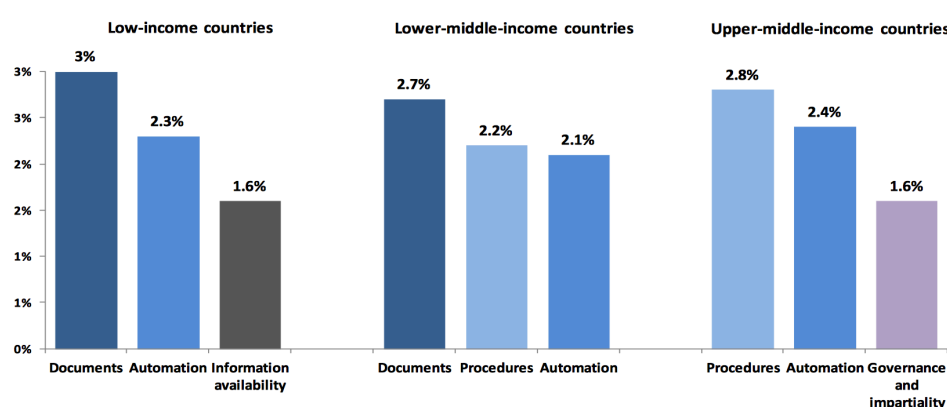
<sup>77</sup> Hiratsuka, D. (2005), “Vertical Intra-Regional Production Networks in East Asia: A Case Study of Hard Disk Drive Industry”; Baldwin, R. (2006), “Managing the Noodle Bowl: The Fragility of East Asian Regionalism”.

<sup>78</sup> The study found that in 2004 the effective tariff rate was 17% higher than the nominal rate in the United States, 46% higher in Korea and as much as 116% and 171% higher in China and Mexico, respectively, due to multiple borders crossing in trade.

long-value chains with several production stages, such as communications and electronics, motor vehicles, basic metals and textiles.

In this context, trade facilitation helps countries participate in GVCs by cutting costs, increasing speed, and reducing uncertainty and as a consequence, the economic gains are substantial. OECD developed a set of trade facilitation indicators that enable the potential impact of reforms to be assessed. These indicators cover the full spectrum of border procedures, from advance rulings to transit guarantees, for 133 countries across income levels, geographical regions and development stages.<sup>79</sup> Analysis shows that trade facilitation measures can benefit all countries in their role as exporters as well as importers, allowing better access to inputs for production and greater participation in GVCs. In addition, comprehensive trade facilitation reform is more effective than isolated or piecemeal measures (Figure 9). The potential reduction in trade costs of all the trade facilitation measures adds up to almost 15% for low-income countries, 16% for lower-middle-income countries, 13% for upper-middle-income countries, and 10% for OECD countries.

*Figure 9: Trade facilitation measures; Potential cost reduction in goods trade (%)*



Source: OECD (2013)

<sup>79</sup>Global Survey on Trade Facilitation and Paperless Trade Implementation: 2014-2015  
<http://unnex.unescap.org/tfforum14-survey.asp>



An analysis commissioned by the World Economic Forum found that reducing two kinds of supply chain barriers (e.g. border administration, infrastructure and services related to transport and communications) could lead to global income gains six times larger than those available through the elimination of import duties worldwide.<sup>80</sup>

The original WEF study did not report results for most of the G20 countries individually. New estimates carried out using the WEF model, considers a scenario in which the G20 countries simultaneously improve their supply chain performance halfway to global best practice. In this scenario, the estimated increase in global GDP is USD 2.5 trillion dollars (5.1% of the GDP of the G20 countries), when measured against a 2007 baseline.<sup>81</sup> The results suggest that all G20 countries would enjoy substantial gains in GDP and, in most cases, trade, from trade facilitation. Note that each country benefits not only from improving its own supply chain conditions, but also from the reforms of its partners acting in concert.

GVCs may also benefit from the assistance of Aid for Trade. Aid and other forms of development finance can promote value chain participation with investments in trade facilitation, infrastructure, and private sector development. In recent years, aid flows to these areas have increased; anyway, the financial crisis and subsequent economic challenges faced by OECD member countries have put pressure on aid budgets. While support to economic infrastructure declined, the rise in aid for building productive capacity in 2011 to USD 18 billion indicates the increasing priority donors attach to private sector development as an engine of growth (commitments to agriculture, industry, and business services rose by a total of 10%). In conjunction, funding for programs with a trade expansion objective doubled

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<sup>80</sup> WEF (2013). *Enabling Trade: Valuing Growth Opportunities*.

<sup>81</sup> In the original WEF model, the estimated change in GDP for the whole world moving halfway to global best practice (not just the G20) was USD 2.6 trillion (4.7%). The main difference between this scenario and the original WEF model is that the rest of the world (non-G20) is not assumed to improve its supply chain barriers.

between 2007 and 2011, reaching USD 5.4 billion (OECD, WTO, & World Bank, 2014).

Going back to the impacts of GVCs, trade in services is now taken into consideration.

Analysts are discovering that their services content incorporated in goods is not only large but also rising. They are coming to appreciate how goods and services are blending together (Ryu, Hosun, Park, & Kim, 2012).

In the production of goods that are then exported, many services are embodied and hence their content of goods trade is much higher when accounting for all the value-added originating in the services sector. The function of services is that of upgrading the quality of products, lowering costs and enhancing efficiency throughout the value chain and for this reason, their provision by manufacturers allows them to differentiate and customize goods.

Services are also linked to agriculture throughout different stages of the value chains, such as agriculture-extension services and rental of equipment at production stage, as well as packaging, warehousing and marketing in the distribution stage (OECD, WTO, & World Bank Group, 2014).

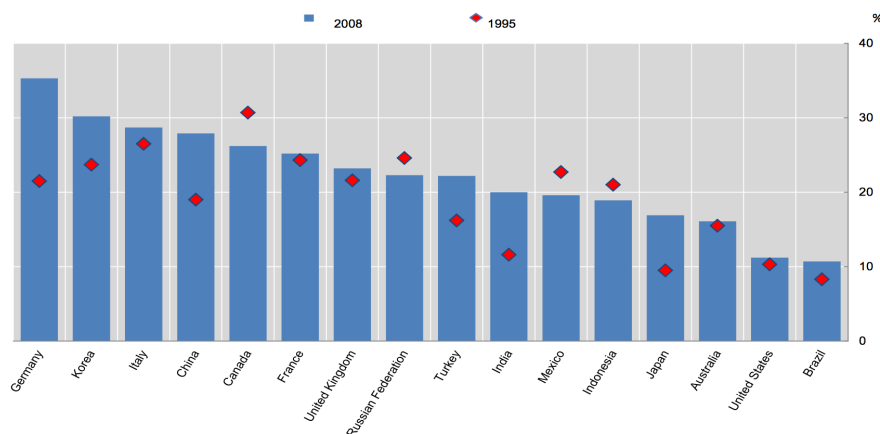
GVCs for goods and services also differ in their actual and potential magnitudes. On the one hand, GVCs are currently less developed for services than for manufactures. According to the *World Investment Report 2013*, in 2010 the global average share of foreign value-added in exports in the tertiary sector (14.2%) was less than half the level of the secondary sector (29.4%). The average was lower still in the primary sector, at just 9.6%. Anyway, the prospects for services growth may be greater. While price increases for fuels and raw materials may raise the costs of establishing far-flung value chains in goods, just the opposite may occur for the services segments of these chains (UNCTAD, 2013). In addition, the continued decline in the costs of computing and communications, coupled with the upgrading of skills in developing countries, make it even more

attractive for producers to off-shore services components in their supply chains.

It is expected that with the increasing trade liberalization and the ambition of going global, not only goods and services are involved in this scenario, but of course also the labor force is included.

OECD estimates suggest that in 2008, between 10% and 35% of business sector workers in G20 countries were engaged in export activities, including towards emerging markets (Figure 10).

*Figure 10: Jobs in the business sector sustained by foreign final demand, 1995 and 2008*



Source: OECD Science, Technology and Industry Scoreboard 2013, based on OECD Inter-Country Input-Output/Trade-in-Value-Added (ICIO/TIVA) database

The increasing internationalization of labor markets implies that labor market policies and institutions can no longer be designed in isolation but have to consider the broader international context. A second implication may be that the increased internationalization of production increases job reallocation and makes workers more vulnerable to shocks as was, for example, discussed in the *OECD Employment Outlook 2007*.

It is also important that the gains associated with the fragmentation of production are fairly distributed. In-work benefits combined with moderate minimum wages can be used to shore up the incomes of low-skill workers.

However, skill development opportunities for low-educated workers are also required to improve longer-term career prospects.

The public media in the US and Europe often claims that offshoring corporate activities to developing countries reduces operations and employment at home. Over the last decades, most developed countries witnessed a shift in labor demand towards more-skilled workers, with an increase in wage and employment inequality. Skill-biased technological change and GVCs are commonly seen as the two main factors behind this evolution.

International outsourcing tends to have a negative impact on the relative demand for low-skilled labor in developed countries. There are several studies using industry level measures of offshoring, combined or not with information on individual wages to evaluate the impact on relative labor demand. For example, Feenstra and Hanson's studies (1996 and 1999) show that skilled workers are more likely to be concentrated in MNEs. This finding holds especially for developing countries, while there is no much difference in skill intensity in advanced economies between MNEs and local firms. For what concerns skill intensity, the standard Heckscher-Ohlin model predicts that demand for unskilled labor falls in skilled rich countries because of the possibility for MNEs to get cheaper unskilled workers. Studies from Head and Ries derive the short-run labor demand based on the assumption that only two factors of production can vary, that are skilled and unskilled labor:

$$SH_{st}^k = \beta_0 + \beta_1 \ln W_{ut} + \beta_2 \ln W_{st} + \beta_3 \ln(K^k/Y^k) + \beta_4 \ln Y_t^k + \beta_5 MNE_t^k + \varepsilon_t^k$$

$SH_{st}^k$  represents the skilled-labor share of the total wage bill in the home country for firm  $k$ ;  $W_{ut}$  and  $W_{st}$  are respectively unskilled and skilled labor,  $K$  is capital and  $Y$  is output for firm  $k$ . MNE measures the relevance of MNE activities and it is expressed as the ration between the value added of international employment and national employment. The most important

coefficient is  $\beta_5$ : if it is positive, other things being equal, MNE activities cause skill upgrading. However, this empirical model fails to explain the aggregate industry effect.

Finally, these considerations explain also why MNEs offer higher wages with respect to local firms. MNEs want to minimize the risk that proprietary knowledge gets dissipated through frequent labor turnover; they seek to build reputations as good employers in order to improve the quality of their applicants; and finally, MNEs are usually perceived as more volatile employers, therefore employees ask for a risk premium. For this topic, Barba Navaretti estimated the constant dynamic labor demand function as:

$$\ln(L_t^k) = \gamma_0 + \gamma_1 \ln L_{t-1}^k - \gamma_2 \ln W_t + \gamma_3 \ln Y_t^k + \gamma_4 \ln r_t + \varepsilon_{it}$$

where  $L_t^k$  is employment in firm  $k$  at time  $t$ ,  $Y$  is output,  $r$  is rental cost of capital and  $W$  is real wages.  $\gamma_1$  measures the speed of adjustment and varies between 0 and 1. The closer is to unit, the faster is the adjustment;  $\gamma_2$  captures the wage elasticity of labor demand. The findings show that MNEs adjust faster than local firms but they adjust less, indeed their wage elasticity in absolute terms is always smaller than the one for local firms.

Among the most important impacts of GVCs is their role in raising growth and productivity. The economic literature has long provided strong evidence that openness to international trade and investment can be an important driver of growth and productivity, although the impacts are often conditional on domestic economic conditions and policies. The impacts of globalization on productivity are due to the efficiency-enhancing impacts of international competition, to access to foreign knowledge and technology, to scope for specialization and economies of scale. There is some evidence of a positive effect when host economies are sufficiently developed to interact with foreign activities, have a minimum threshold stock of human capital, have a developed financial market and are export-oriented. The comparison

between MNEs' performance and local firms' performance can be carried out following two approaches: the unconditional approach and the conditional one. The former takes into account the whole bundle of differences, while the latter approach requires econometrics that control for observable characteristics in order to isolate the effects deriving from the ownership status. Under the unconditional approach, the average productivity is computed based on labor productivity; if there are  $N$  local firms, their average productivity would be equal to:  $\overline{q^N} = \frac{[\sum_{k=1}^n \beta z(xk)]}{N}$  where  $\beta$  is the efficiency parameter. In the same way we can compute the average productivity of  $M$  multinational firms as  $\overline{q^M} = \frac{[\sum_{k=1}^m \alpha z(xk)]}{M}$ .

Considerable evidence shows  $q^M > q^N$  and the differences are driven, at least in part, by the fact that MNEs generally are larger, they exploit firm-specific economies of scale, invest more in R&D and use more intermediate inputs. A standard way to take into account these differences is by using the conditional approach referring to the Total Factor Productivity (TFP):

$$Y_{ijt} = a_1 A_{ijt} + a_2 SL_{ijt} + a_3 UL_{ijt} + a_4 M_{ijt} + a_5 K_{ijt} + \varepsilon_{ijt}$$

where  $Y$  is the output,  $A$  is a Hicks neutral productivity parameter.  $UL$  and  $SL$  are respectively unskilled and skilled labor,  $M$  is a measure for intermediate inputs and  $K$  is capital. A set of dummy variable could be added in order to capture the ownership status of the firms; also the studies using a conditional approach show that foreign firms induce a positive effect on performance.

In addition to these effects, participation in GVCs may increase productivity by facilitating access to cheaper or higher-quality intermediate inputs. Industries with a higher share of imported intermediate goods display on average higher productivity in OECD countries, as foreign inputs embody more productive technology and resources are re-allocated more efficiently. First, this is because of a price effect since increased intermediate imports

result in stronger competition between producers of intermediates and therefore lower the price of intermediates; second, due to a supply effect because increased imports enhance the variety of intermediates available; finally because of a productivity effect since new intermediate goods may be better suited to the technology of final goods producers and may spur innovation in the final goods sector by enhancing access to foreign knowledge.

OECD calculations show that most world regions, including both OECD and emerging economies, have increased the value added they create and capture in GVCs of manufactured goods, although the share of OECD economies has declined over time. Both the EU and the United States increased their value added from manufacturing GVCs, but growth was strongest in market services.<sup>82</sup>

## **2.4 Developing Countries**

GVCs encourage the upward movement by rewarding skills, learning, and innovation. This could be one of the reasons why GVCs are especially important for developing countries, for which the best metaphor would not be a chain but a ladder.

The foreign investments in the production of goods and services, and increasingly in more advanced operations such as research, design, and innovation, have given benefits and advantages to some developing countries. The latters are becoming every day more attractive as both platforms and markets, where the growing skills of an emerging middle class coincide with the rising incomes of those same producers and consumers (e.g. China and India). This growing integration of some developing countries into GVCs has been the result of concurrence of factors, including new business strategies in the home and in the hosting

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<sup>82</sup>OECD (2013), “Interconnected Economies: Benefiting from Global Value Chains”, <http://www.oecd.org/sti/ind/interconnected-economies-GVCs-synthesis.pdf>

countries, targeted policies to promote integration and internationalization and new forms of public-private partnerships (OECD, 2013). To identify useful generalizations for developing country policies it is necessary to group product-level GVC analyses across multiple developing country contexts. For each sector (agriculture, extractive industries, manufacturing and services), an overview of the GVCs in the context of developing countries is presented, including opportunities, industry trends and main barriers to entry upgrading in these chains. Notwithstanding the above, not all developing countries have been able to benefit to the same extent from GVC participation, particularly lower income countries and those more distant from international markets.

Starting with the agricultural value chains, the international trade of fruit and vegetables reached USD 139.6 billion in 2008 (UNComtrade, 2011). Motivated by this growing global demand as well as the potential to contribute to poverty alleviation through enhanced incomes and additional rural jobs, developing countries have actively sought to increase production and exports within high-value agricultural subsectors (Weinberger & T.A.Lumpkin, 2007). The importance of this sector to developing and developed countries alike is highlighted by the fact that aid agencies, already heavily engaged in agricultural projects, are allocating a growing percentage of their funds to this sector.

Participation in global agricultural industry, particularly for high-value agricultural products, has changed substantially over the past two decades. Traditionally, agro-food sectors included producers of all sizes that participated in spot markets, where the forces of demand and supply prevailed and the highest bidder purchased the available product. Today, this simple arrangement has been replaced by a highly complex agro-foods system. Traditional markets organized around local sourcing have been exchanged in both developed and developing countries for vertically



coordinated, buyer-driven chains led by large supermarket brands operation in national, regional or international markets<sup>83</sup>. Furthermore, in an effort to meet increasingly discerning consumers, abide by strict food safety standards, and at the same time reduce transaction costs, buyers have tended towards a consolidation of their supply chains, reducing their overall number of preferred suppliers. Preferred suppliers now must demonstrate a strong capacity to consistently supply high quality products, based on established product and process specifications, on schedule and at a competitive cost. Competition is fierce for these limited positions, and suppliers must consistently meet these requirements to retain their position within the chains.<sup>84</sup>

Despite strong demand, the increased consolidation of agricultural GVCs makes it difficult for many developing country firms – especially small producers - to participate and upgrade in these industries. The most important barrier to GVC participation is the strict set of public and private standards that must be met to gain and sustain access to these chains (Henson & Humphrey, 2009, 2010; Humphrey, 2006; Jaffee et al., 2011; Lee, Gereffi, & Beauvais, 2012; Maertens & Swinnen, 2009; Reardon et al., 2009; van der Meer, 2006). Upgrading into packing and processing is governed by numerous quality and food safety standards, which makes it challenging for developing countries to increase the value earned from their products.

Moving forward with the extractive-Industries value chains, high global demand for oil and gas and a strong demand for commodities, to a large

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<sup>83</sup> See Reardon et al. (2009) for an overview of changes in international agricultural trade and the emergence of agro-food GVCs.

<sup>84</sup> These barriers to entry differ with regional and south-to-south markets. First, a growing number of regional trade blocks provide tariff free movement of goods into regional markets, although developing countries tend to have higher tariff barriers for agricultural products than other sectors (IDE-JETRO/WTO, 2011). Second, regional markets tend to have less rigorous standards, and thus represent lower barriers to entry for developing countries (Diaz Rios & Jaffee, 2008; Kaplinsky et al., 2011). Third, regional chains tend to be less consolidated than global chains, allowing for a larger number of suppliers to participate. Nonetheless, this is beginning to change with a growing number of supermarkets in emerging markets (Reardon et al., 2003).

degree led by China, offer important opportunities for resource-rich developing countries to enter and upgrade in these GVCs.<sup>85</sup> Even those reserves characterized by costly extraction are being seriously considered, and production firms are competing to access these reserves around the world. This high demand gave to developing country economies the opportunity to reduce their dependence on primary products exports and increase the value they capture from participating in extractive GVCs by fostering linkages between local suppliers and large foreign extraction firms, improving training of local technicians and management and increasing the potential for knowledge and technology transfer (Morris et al., 2012).

Nowadays, several functions are outsourced in production, including engineering, design and project management and drilling operations (Urzúa, 2012). The oil and gas industry has followed a similar trajectory, catalyzed by low oil prices in the 1990s, and today, even highly specialized exploration activities have been spun-off into independent firms (Bridge, 2008). Similar key production functions are being outsourced to global firms with the capacity to operate in multiple regions simultaneously, allowing these firms to secure dominant positions within the chain (Bridge, 2008; Farfan, 2005; Fessehaie, 2012).

The capital, knowledge and technology intensity of these sectors has put firms from emerging economies at a disadvantage and led to the emergence of extractive “enclaves” lacking linkages with the rest of the domestic economy (Morris et al. 2012).

The key factors affecting the sustainable inclusion of developing countries in extractive-industries GVCs can be identified as follows: human capital availability; national systems of innovation; energy infrastructure and services; public governance; and access to finance. The last three are

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<sup>85</sup> The demand for copper in China, for example, grew on average 14.2% per annum between 1990 and 2010 (Fessehaie, 2012).

particularly important for smaller, domestic firms. These firms often have lack of resources to compete for scarce, qualified human capital in developing countries or to invest in developing new technologies. In addition to these factors, the limited national development policy is offered as an important reason why developing countries have not been able to adequately leverage their natural resources to upgrade in these chains (Farfan, 2005; Morris et al., 2012; Sigman & Garcia, 2012).

Concerning the manufacturing value chains, since the late 1980s, a number of trends in manufacturing industries have created new opportunities for developing countries to participate in GVCs and upgrade their capabilities over time. First, manufacturing industries have experienced rapid growth in FDI, global production and cross-border trade (Sturgeon & Gereffi, 2009). In addition, large firms have become comfortable outsourcing a growing number of “non-core” activities, particularly production and assembly, to suppliers (Gereffi & Sturgeon, 2013). As a result, an increasing number of developing countries are finding opportunities to insert themselves within manufacturing GVCs and to develop capabilities for upgrading. Manufacturing GVCs encompass a broad range of governance types (including producer-driven, buyer-driven and modular), geographic scales (global and regional) and production technologies (broadly, labor- versus capital-intensive). Especially, it is possible to distinguish three main different manufacturing GVCs starting from apparel then automotive and finally mobile handsets.

Apparel production is considered an important incentive for national development, and has been a typical starter industry for countries involved in export-oriented industrialization since the 1970s due to its low fixed costs and emphasis on labor-intensive manufacturing (Fernandez, Frederick, & Gereffi, 2011). Since the Multi-Fiber Arrangement (MFA) was phased out in 2005, factors such as labor cost, productivity and firm capabilities, have been brought up front for countries wishing to participate in apparel GVCs. Upgrading in apparel chains entails the movement from simple assembly

(cutting and sewing) of imported textiles to sourcing fabrics and distributing finished products to the design and branding of garments. Upgrading generally requires a strong public and private commitment to developing the necessary human capital (Fernandez, Frederick, & Gereffi, 2011).

Concerning the automotive industry, global automotive production has more than doubled since 1975, from 33 to nearly 73 million vehicles in 2007 (Sturgeon & Gereffi, 2009), a trend that has been facilitated by growing middle classes in large, emerging economies such as China, India and Brazil. Automobile manufacturing – a typical producer-driven GVC (Gereffi & Korzeniewicz, 1994)– exhibits many characteristics, which set it apart from apparel manufacturing and is thus associated with different upgrading trajectories. Whereas the globalization of production networks characterizes the apparel industry, regional production is the norm in automotive manufacturing; both final assembly and component-production take place close to end-markets (Miroudot & Backer, 2012; Sturgeon & Biesebroeck, 2011; Sturgeon, Gereffi, Rogers, & Fernandez-Stark, 2010). This happens due to several reasons: components and final goods are heavy and difficult to ship; product markets are country-specific; assembly is highly concentrated within a handful of lead firms; and product development requires close collaboration between suppliers and lead firms (Conteras & Carillo, 2010).

These unique technologies and governance characteristics suggest that upgrading opportunities within the automotive industry will be very different from those for apparel. Moreover, upgrading in the automotive industry is tied more to public commitments to policies that promote FDI and facilitate innovation among firms (Barnes & Morris, 2008; Ozatagan, 2011; Sturgeon & Biesebroeck, 2011).

The rise of well-organized GVCs combined with declines in transportation costs have also contributed to the offshoring of high-tech manufacturing from developed to developing countries (Xing & Detert, 2010). In spite of globalized production, quantitative studies of mobile handset GVCs reveal

that most value-added in this industry remains in developed countries, suggesting that upgrading among developing countries remains fairly limited, as production activities remain limited to assembly and the supply of low-value, commoditized inputs (Ali-Yrkko, Rouvinen, Seppala, & Yla-Anttila, 2011; Dedrick, Kraemer, & Linden, 2010; Xing & Detert, 2010).

The quick pace of innovation in the mobile handset industry (and within other product categories in the electronics industry) places enormous pressure on developing countries to keep up with rapidly changing technology frontiers and presents a substantial barrier to upgrading in countries with low R&D expenditures (Sturgeon & Lester, 2004).

Finally, understanding the role of developing countries in service sectors presents several difficulties. First of all because today, many services are “delivered” to the client over the Internet, and the reporting of these transactions is imperfect. Second, it is difficult of exactly defining the field of these economic activities (Tejada, Santos, & Guzmàn, 2011).

The separation of the provision and consumption of services has been facilitated by the ICT revolution. The offshore services industry has been identified as a major opportunity to involve developing countries in the global knowledge economy since they have grown exponentially in the past two decades, offering high quality jobs and career development alternatives (Fernandez-Stark K. , Karina, Bamber, & Gereffi, 2011). Drawn by these potential benefits, developing countries offer attractive incentive packages to companies to use their territory as a services export platform (Fernandez-Stark, Karina, Bamber, & Gereffi, 2013; G.Gereffi, Castillo, & Fernandez-Stark, 2009). While the industry initially expanded based on low-cost, yet educated labor forces around the world, more sophisticated, knowledge-intensive work is now being performed abroad. This has increased the importance of the supply of scientific, engineering and analytical talent offered by developing countries (Couto, Lewin, Mani, Manning, Sehgal, & Russell, 2007).

## **2.5 Participation in GVCs and its consequences**

Not all firms and countries are equally involved in GVCs; the degrees of connectedness are not determined only by a country's openness to trade, but there are also some other considerations. Some countries participate in many and varied GVCs, either as the host country to lead firms or as supplier of very specific tasks, while others have experienced little penetration. What makes the level of participation differ within countries is an array of factors; some of them are permanent and not subject to change such as a country's geographic location and its endowment of natural resources, while others can be shaped by the laws and policies that a country enacts, the international agreements into which it enters, and the investments that it makes. These include the modernity of the infrastructure, the skills of its workforce and the friendliness of the business climate and the capacity of public administrations to mobilize and coordinate with business and labor organizations (OECD, WTO, & World Bank Group, 2014).

However, there are some important opportunities and benefits that can be useful most of all for developing countries arising from GVCs, starting from the fact that overcoming obstacles to GVC participation can pay big dividends to developing economies. Having appropriate policies to adapt GVCs activities, with the fastest growing GVC participation have GDP per capita growth rates 2% above average (OECD, 2013). Because GVCs have low entry barriers, they enable firms to realize export success relatively quickly and at low cost and to become export-competitive by specializing in specific activities and tasks (OECD, 2013).

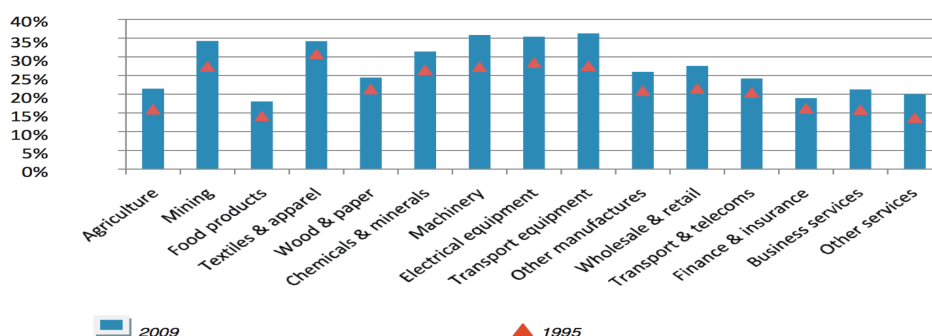
The countries, wanting to be a part of GVCs and to reap the benefits from GVCs participation must have open, predictable and transparent trade and investment regimes. These types of regimes facilitate not only GVCs participation but foreign direct investments (FDI) as well. In GVCs, for intermediate goods and services trade, fast and efficient customs and port procedures are essential to the smooth operation of supply chains, as goods

cross borders many times, first as inputs and then as final products. The countries where customs and port procedures are fast and efficient will be the best location for FDI as well.

It is understood that every country and every industry can benefit from GVCs because nowadays all manufacturing activities and increasing number of services sectors is subject of activities of GVCs. In industries such as mining, textiles and apparel or machinery, more than one-third of imported intermediate inputs are used to produce exports (Figure 11).

It is always important to highlight that GVCs participation requires skills, educated labor, productive capacity, successful global supply chain participation and effective logistics, information infrastructure.

*Figure 11: Intermediate imports embodied in exports, % of total intermediate imports (2009)*



Source: OECD/WTO TIVA database, May 2013 release

Naturally, GVCs have also some drawbacks concerning mainly policies and investments. For example, anti-competitive applications may impede the success of GVCs if the competition regulations are not enough good and effective. The domestic competition laws and cooperation with the other countries are very important to get benefits of the GVCs activities.

Furthermore, all GVCs require well-functioning transport, logistics, finance, communication, and other business and professional services to move goods and coordinate production along the value chain. This phenomenon

increases the importance and share of services and burden of being part of GVCs.

As a consequence, GVCs participation requires sufficient investment in skills and sophisticated technological progress. Without these requirements involvement in GVCs do not translate into productivity growth, and countries can no longer compete in an increasingly knowledge-based global economy (OECD, 2013).

After having underlined the opportunities, benefits and drawbacks, countries can make a choice on whether to promote or not GVCs participation by taking into consideration their specific situation and factor endowments. In this scenario, governments play a key role, as they may enact policies that either promote or reduce the capacities of their firms to enhance their competitiveness, attract investment, and insert themselves into GVCs. Indeed, the capacity of firms to meet the requirements of GVCs is affected by the institutional context in which they operate.

Industrial policy is an area where governments must strike a balance between their efforts to promote opportunities and the temptation to overreach. Countries are carrying out a wide range of industrial policies aimed at upgrading their productive structure and increasing their participation in GVCs. Anyway, the risk of failure is high due to information asymmetries that reduce state planning capacities, also governments could face obstacles in quickly fine-tuning actions, and finally withdrawing support is difficult as lobbies will try to prevent change.

This is not to suggest that there is no role for the state in promoting competitiveness and encouraging participation in GVCs. Many countries are using such schemes as technology funds to finance and promote innovation and to upgrade production in priority areas (OECD, WTO, & World Bank Group, 2014).

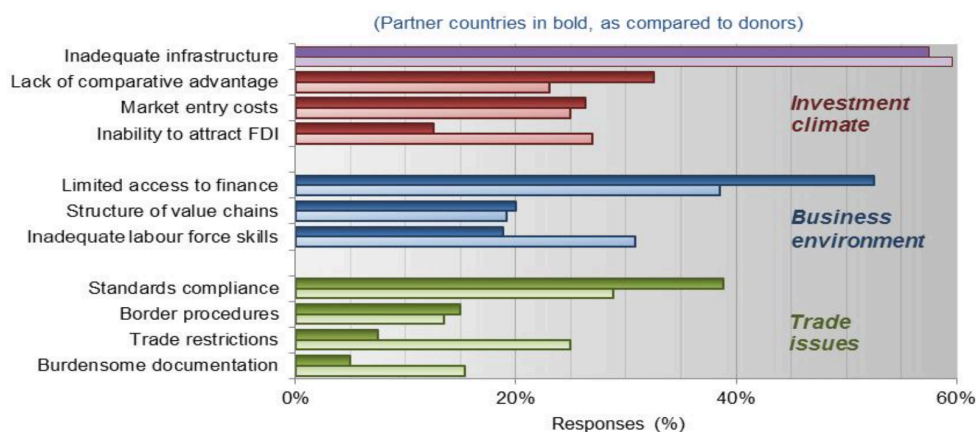
Investment and development of local suppliers' policies play central roles in determining how developing countries can access and upgrade in GVCs as well as the net benefits that are accrued domestically (OECD, 2013).



Competition law and policy can help add value to exports from developing and least-developed countries (LDCs) by removing barriers to key sectors in GVCs. An important challenge for competition authorities is to promote the benefits of standardization while preventing its possible anticompetitive effects that can result from industry actors' decision to adopt standards that may restrict access of potential competitors to the market.

There are some other issues that can be highlighted from the survey results conducted jointly by the OECD and WTO in 2013 illustrated in figure 12 and 13. The first figure reports the views of the public sectors in OECD countries and partner (developing) countries. The latter and providers of trade-related assistance highlight three main barriers that their firms face in connecting to value chains: inadequate infrastructure, access to finance, and standards compliance. Especially developing countries are concerned with their inability to attract foreign direct investment, lack of labor force skills, and the effect of trade restrictions and excessive documentation.

Figure 12: Barriers firms face in entering value chains (Public sector views)



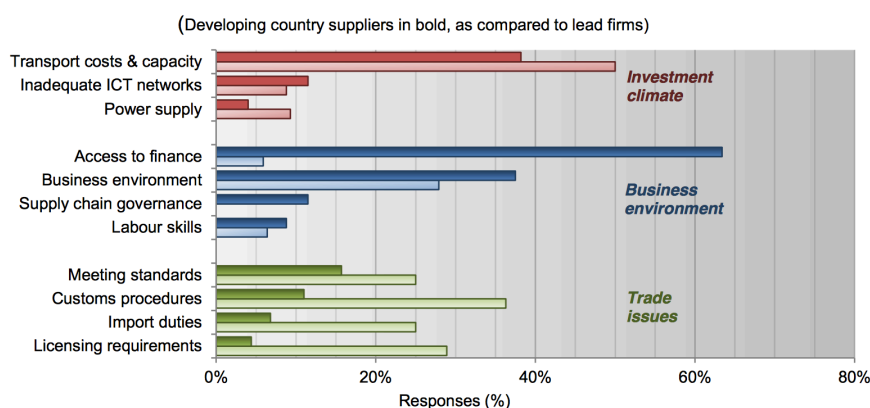
Source: OECD-WTO Aid-for-Trade Questionnaire (2013)

Figure 13 reports different results obtained from a survey of the private sectors in the same countries but mainly both figures lead to the same

considerations. For example, suppliers from developing countries all ranked access to finance as the main obstacle preventing them entering, establishing, or moving up the value chains.<sup>86</sup> They also cited transportation and shipping costs, inadequate infrastructure, and regulatory uncertainty as major obstacles, together with a lack of labor force skills.

Government interventions in the social sphere could help ease certain impediments to developing country participation in GVCs. Policies seeking to harness informal entrepreneurship, may also be beneficial.

*Figure 13: Barriers firms face in entering value chains (Private sector views)*



Source: OECD-WTO Aid-for-Trade Questionnaire (2013)

As it is shown in the survey, the ability of firms to participate in GVCs is greatly affected by the quality of physical infrastructure, as roads, ports and airports, as well as the efficiency of the procedures followed in the operation of these facilities. Reliable and cost-competitive infrastructures facilitate both trade linkages and FDI attraction.

Developing countries face resource and capacity constraints to providing high quality infrastructure throughout the entire economy. Whereas telecommunications links are crucial for participation in offshore services

<sup>86</sup> The views of the private sector were also sampled across five key sectors that are of particular importance for developing countries: agrifood, ICT, textiles and apparel, tourism, and transportation and logistics.

GVCs, transportation and energy infrastructure play a more important role in manufacturing and developing countries should seek to direct investments in such a way that domestic firms are not excluded from the benefits associated with GVCs participation.

In general, good governance is a sign to prospective investors and traders that a country is a good place where to invest their capital.

## **2.6 Improving GVCs Performance**

There is scope for policy interventions in several areas to promote growth in GVCs. Indeed, policies with economy-wide effects, such as a stable economic and political environment, human capital development, and a national infrastructure of roads, ports, and telecommunications systems have been broadly taken in consideration. Nowadays, there is an emerging shift towards the idea that in order to engage in specific GVCs countries require policies that go beyond broad initiatives focused on fostering competitiveness and investments. In countries that have successfully engaged in lining to an upgrading in GVCs, several institutional actors have begun to address these constraints more actively. These include governments, businesses, civil society, and international organizations (Milberg, Jiang, & Gereffi, 2014).

Participation in GVCs requires a high level of coordination and collaboration across industry stakeholders in the public, private, and even non-profit sectors in order to ensure that interests are aligned, skill gaps are closed, and structural constraints are addressed. Sustained interaction among industry stakeholders can be promoted through a number of mechanisms and strategic public and private councils for selected industries can help identify the most urgent constraints facing developing countries. Industry associations that include both MNEs and local firms can promote multiple forms of collaboration, such as certification initiatives and joint ventures. In addition, co-operation at the inter-ministerial level helps to ensure that

infrastructure, education, investment and trade policies jointly contribute to development goals. The upgrading of developing countries could be facilitated simply by coordinating the activities of export promotion and the investment attraction agencies (OECD, WTO, & World Bank, 2014).

Participation and upgrading within value chains requires most importantly investment in innovation and knowledge-based capital, such as R&D, intellectual property, software, and data, as well as economic competencies such as organizational know-how and branding. GVCs depend critically upon competence and competitiveness in the performance of specific tasks, and ultimately upon the education and skills of the workforce and its entrepreneurs. The international fragmentation of production occurred as a reflection of GVCs, which has given rise to new opportunities for the exploration of domestic factor endowments, including human capital. They thus have distinct effects on the position of different skill group in different countries.

Countries that are tied in to GVCs generally have higher skill levels than those that are not, and participation in these value chains sharpens that distinction as firms and workers learn. Research drawing upon the World Input-Output Database (WIOD) shows that in most OECD countries the share of high-skilled workers in total GVC manufacturing employment increased much faster than the share of low skilled. Conversely, vertical specialization in developing countries leads to a significantly more labor content in medium- and low-skill than in the high-skill end of the spectrum (Jiang, 2013).

In comparing OECD and emerging economies a contrasting picture emerges also at the sectoral level. Although the decline in demand for low-skilled labor over 1995-2008 in OECD economies was to a large extent driven by a reduction in the demand for low-skilled labor within manufacturing or services, these sectors contributed to creating low-skills jobs in emerging economies where the decline in low-skilled demand originated from natural resource sectors. The sizeable increase in demand

for high-skilled labor was mainly driven by an increase in demand for high-skill workers in services, albeit in some countries (e.g. China, India, France) manufacturing also added high-skill demand.

Workers might be affected by GVCs in different ways, depending on the tasks they perform. For example, workers that perform manual or cognitive tasks that lend themselves to automation or codification (e.g. book-keeping, monitoring, information processing) are most likely to be affected because; many of these tasks can potentially be offshored. Nevertheless, such tasks may be complementary to those that cannot easily be digitized or offshored due to high transaction costs or the need for contact with customers. Highly skilled workers are less likely to be affected, as they tend to perform non-routine cognitive tasks that complement information technology; demand for such workers often increases with greater investment in information technology. Low-skilled workers engage in non-routine tasks such as operating vehicles and assisting and caring for others, which may be less affected by trade or technology. GVCs clearly contribute to the shifting demand for skills, but again it is difficult to know how much is due to trade and how much to technology (OECD, WTO, & World Bank, 2014).

Given the importance of raising skills, the initiatives of tailoring skills and developing other human capital, it is essential for entry into GVCs and upgrading within industries. Developing countries often face obstacles in filling key technical positions to meet the process upgrading requirements of GVCs. Human capital is a great constraint in countries where limited educational resources have been targeted towards professional and university education rather than technical and vocational education. Technical workers are often central to ensuring standards compliance, and that each product runs in the factory meets quality requirements. The government alone, particularly in the agricultural and mining sector, often undertakes skills' training. However, these programs tend to be understaffed and based on outdated methodologies. Leveraging buyers to train local staff can be a more efficient means of knowledge transfer in the context of GVCs

because information is up-to-date and corresponds to the needs of the lead firms. Recent work in the context of the OECD Skills Strategy has generated new evidence on the differences in education and skills across countries. For example, the Program for International Student Assessment of mathematics, reading, and science found large differences, with some countries (e.g. Japan and Korea) and specific regions or cities (e.g. Shanghai) having very high-test scores relative to other areas. It is no coincidence that these are also centers of high GVC connections. The results of these studies<sup>87</sup> led to several conclusions as the fact that education alone is no longer enough as skills need to adapt over time. Countries need to combine high-quality initial education with lifelong learning opportunities to help ensure that workers are well prepared for the future. Second, promoting training in occupation-specific and general skills is an important aspect of developing a workforce adapted to jobs needed for an economy to grow in the context of increased integration of production processes. Third, it is important to strengthen links between the world of learning and the world of work to ensure that education and training are relevant to the evolving skills needs in the labor market.

Given the speed with which production technologies evolve, as well as the requirements of quality and process standards that characterize GVCs, effective and responsive education and workforce development policies are critical to enabling profitable participation in GVCs. Improving labor mobility, skills certifications and regulations governing the employment of foreign nationals can help to fill bottlenecks in the short term, keeping in mind that the long-term goal should be to upgrade the general skill level of the workforce. This implies that developing countries should consider complementarities between national systems of innovation and workforce development institutions in devising strategies for industrial upgrading.

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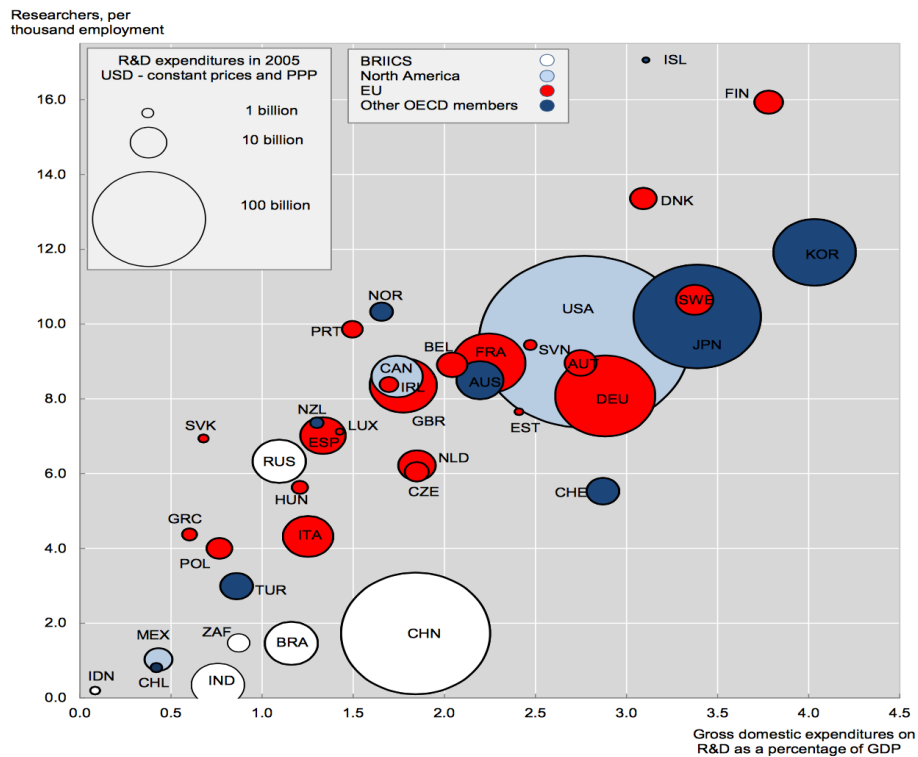
<sup>87</sup> OECD (2014), “Achieving a Level Playing Field for International Investment in Green Energy”.

Generally speaking, investment in innovation has grown steadily in both advanced and emerging economies. In the United States, the business sector has invested more in knowledge-based capital (KBC) (e.g. software, data, R&D, firm-specific skills and organizational capital) than in tangible investment since the mid-1990s<sup>88</sup>. In several other OECD economies, such as United Kingdom, this is the case too, but emerging economies also are investing increasingly in such assets. Estimates suggest that China invested 7.5% of GDP in such assets, of which less than 20% was in R&D, primarily in software and design. In Brazil, such investment amounted to about 4% of GDP over the past decade, whereas it stood at just under 3% of GDP in India in 2007. These developments can also be seen in global investment in R&D, where emerging economies account for a rapidly growing share of total investment, with China's R&D intensity recently surpassing that of the European Union (Figure 14).

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<sup>88</sup>OECD, *New Sources of Growth: KBC Driving Investment and Productivity in the 21<sup>st</sup> century* (2013). <http://www.oecd.org/sti/50498841.pdf>

Figure 14: R&D Investment in OECD and G20 economies, 2011



Source: OECD, Science, Technology and Industry Scoreboard 2013

Investments in KBC drive productivity growth and determine the extent to which the final product of a value chain can be differentiated in consumer markets. For example, much of the success of recent Apple products is due to design features. The value that a firm creates within a GVC also depends on the difficulty for rivals to supply similar or substitutable products. When a product is easy to replicate, which means it is not protected by intellectual property rights (IPR), rival firms can easily develop substitutes for the inputs that a firm provides to a GVC.

Policy can help make firms to implement and commercialize new ideas, lower the costs of failure and encourage them to take risks and experiment with potential growth opportunities. Innovative firms can play a key role in diversifying countries' participation in GVCs and in supporting the upgrading process. All of this requires well-functioning product and labor markets and bankruptcy laws that do not overly penalize failure. Recent



OECD work shows, for example, that reducing the stringency of bankruptcy legislation from the highest to the average level in the OECD could raise capital flows to patenting firms by around 35%, thus supporting the reallocation of resources to the most innovative firms<sup>89</sup>. Ensuring that existing policies for innovation, such as R&D tax credits, do not unduly favor existing firms can also help foster entrepreneurship and experimentation.<sup>90</sup>

Not only the policies encouraging firms to take risks and experiment potential growth opportunities play a fundamental role in investing on innovation for the upgrading process through the GVCs. Indeed, also the social and environmental ones are increasingly becoming essential especially in a time when consumers are increasingly concerned over the social and environmental impact of their purchasing decisions. Countries and companies are likewise sensitive to the pitfalls of sourcing or investing in markets that may be associated with the exploitation of workers, the violation of human rights, military aggression, or poor records of environmental protection. Business should be conducted in a manner respectful of human rights and environment as prescribed by the OECD Guidelines for Multinational Enterprise, ILO and UN recognized standards. Companies are increasingly considering sustainability performance as a strategic brand positioning issue, including global environmental impacts such as life-cycle carbon emissions. Beyond the avoidance of social and environmental violations, governments should also consider the ways in which compliance with higher standards may enhance both their reputations and their attractiveness to potential traders and investors, including

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<sup>89</sup> OECD (2013), “New Sources of Growth: KBC; key analysis and policy conclusions”, <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=C/MIN%282013%296/FINAL&docLanguage=En>

<sup>90</sup> Symposium (2014), “Maximizing Growth From Knowledge-based Capital”, <http://www.global-economic-symposium.org/knowledgebase/workshop-2014new-approaches-to-economic-challenges2014/proposals/maximising-growth-from-knowledge-based-capital>.

potentially attracting higher returns for local producers than would otherwise be the case.

Another important aspect is the “greening” of GVCs and the potential for GVCs to contribute to international environmental and social objectives through raising standards all the way up the chain<sup>91</sup>. The greening of GVCs requires traceability and transparency. The former is necessary to track hazardous products and materials, allocate responsibilities and monitor environmental compliance. The latter is a precondition for achieving credibility, legitimacy and fairness, which preclude green washing or shifting polluting activities to developing countries. This means each firm or plant in a GVC should be gathering and sharing data about environmental risks and impacts. Governments and business associations can play a major role in improving the capacity for environmental information gathering and communication, both directly through research grants, and indirectly through environmental labeling, certification to standards required by national ecolabels or private labels such as the Forest Stewardship Council, and encouraging participation in programs like the Global Reporting Initiative, the Toxic Release Inventory in the United States, and the Regulation, and Evaluation and Authorization of Chemicals in the European Union.

## **2.7 Conclusion**

The rise of the Global value chains (GVCs) has dramatically changed the organization of world production of goods and services, producing a deep and lasting impact on international trade and investment patterns, labor market developments and the way policy makers interpret trade policies and external competitiveness. However, the reduction of transport and communication costs, the acceleration of technological progress and the

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<sup>91</sup> OECD (2013), “Greening Global Value Chains: Implementation Challenges”.

removal of political and economic barriers to trade increased the opportunities for international fragmentation of production.

Countries can make a strategic choice whether to promote or not GVCs participation, so they need to carefully weigh the pros and cons of GVC participation, and the costs and benefits of proactive policies to promote GVCs in line with their specific situation and factor endowments. With the right policies, developing economies can integrate into global value chains by empowering SMEs, removing barriers to their participation in international trade, easing access to finance, improving infrastructure, and developing human resources.

GVCs incentivize economies to move up the value chain by increasing the value they contribute and continuing to specialize; nowadays, they are probably the most prominent feature of globalization.

## **CHAPTER 3**

### **The Role of Turkey in the GVCs**

#### **3.1 Introduction**

Countries' integration in the global economy is nowadays closely linked to their participation in GVCs.

As mentioned in Chapter 2, 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. 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.

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.

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 and 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 (The World Bank, 2014).

Fostering economic upgrading requires policies focusing on endowments such as capital, technology and knowledge.

The chapter will start with an overview of Turkey's export performance together with its relation with both the European and the Middle-East

markets. Then, it will be discussed Turkey's participation in GVCs including an analysis of three selected sectors: motor vehicles, textiles and apparel, and agro-food highlighting the determinants of the spillovers from GVCs, in terms of enhanced productivity for domestic firms.

### **3.2 Turkey and EU Relations: Exports, Exporters, Partners**

Turkey's European aspirations are rooted in Kemalism, which consists in Mustafa Kemal's choice to take the secular and liberal Western Europe as a reference model. It was a difficult and courageous decision, especially in light of the early twentieth century context, when the socialist doctrine was very popular and the Arab-Islamic model was an easy alternative for a Muslim country.<sup>92</sup>

The EU institutions encouraged Turkey to get closer to Europe through a long and difficult integration policy, which marked the last fifty years of European history and found its defining moment with the opening of accession negotiations, decided by the Union in 2004.<sup>93</sup>

This first section will present a review of economic literature in order to facilitate the identification of main issues associated with bilateral economic relations between EU and Turkey. The main source that will be used in this paragraph will be the European Commission's report entitled "*Assessment of trade and investment potential between Turkey and EU's crisis-struck economies, the neighboring Member States and Croatia*" (European Commission, 2014).

First of all, an initial observation to note is that in a relatively short period of time, Turkey experienced several major shifts in economic development strategies that reflected in differentiation of its trade and FDI profiles. The

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<sup>92</sup> Fiorani Piacentini V (2005) (a cura di), *Turchia e Mediterraneo allargato. Democrazia e democrazie*. Franco Angeli, Milano.

<sup>93</sup> European Commission 'EU-Turkey Relations (2010), [http://ec.europa.eu/enlargement/candidate-countries/turkey/eu\\_turkey\\_relations\\_en.htm](http://ec.europa.eu/enlargement/candidate-countries/turkey/eu_turkey_relations_en.htm).

performance of Turkish exports after 1980 can be classified in four sub-periods.

The first one is about the traditional exports policies in early-to-mid 1980s, when a rapid fall in prices and a gradual rise in real exports were observed due to the export promoting policies based on the depreciation of the Turkish lira (TL) and the export subsidies. Export goods were mainly commodity and labor intensive with imports of semi-finished products and equipment.

The second period focus on the structural changes and Customs Union in 1987-2001, which represents a period of gradual capital account liberalization in Turkey during which TL appreciated in real terms as a result of an increase in capital inflows. The prospect of Turkey-EU Customs Union (CU) signed in 1995 was then considered by Turkey as an intermediate step towards membership into the Union, and several traders and investors developed a new strategy towards Turkey thus anchoring Turkey in the EU system as a place for production offshoring and outsourcing. The profile of flows shifted progressively towards intra-branch trade and in return, the appreciation of Turkish Lira slowed down the growth rate of exports during this period, but incoming FDI stabilized after 1988, and until 2000 at higher but still moderate level of USD 1 billion annually.

The third period refers to the economic stabilization and exports boom in 2001-2007, when Turkish policymakers initiated an extensive reform program under IMF supervision, aimed at reducing public deficit, reforming the banking sector, implementing a floating exchange rate regime, and decreasing the inflation rate to single digits in the post-2001 period. As the Turkish economy struggled to cope with the post-2001 crisis era, average yearly growth rate of Turkish exports has reached 20.9 percent, which is registered as the highest in recent Turkish economic history, fuelled by competitive disinflation and technology transfers stemming from FDI.

Stimulated by economic stabilization and new dynamics of exports, a new wave of incoming FDI mainly from the EU, started in 2001.

The last period is the most recent one, and refers to the resilience of the Turkish economy in 2007-2012 with the crisis Turkish economy contracted in 2008 and 2009, and then rebounded, pulled by domestic demand since 2010 and new foreign markets. Between June 2009 and June 2010, Turkish economy created 1,500,000 jobs. A robust macroeconomic framework explains the resilience to crisis together with high interbank liquidities with low interest rate, international confidence, and good reactivity of business in cutting costs and finding new markets. A new era of Turkish economy has opened with high FDI flows from the EU and elsewhere.

Focusing on the exports, an econometric analysis was conducted examining the changes in major Turkish exports destined to the EU market, and the determinants of competitiveness for the period 1987-2006 (Akkemik, 2011). In this method, competitiveness of Turkish products is examined vis-à-vis its competitors in the EU market. The results show that Turkey's competitive position has improved in textiles, iron and steel and automotive exports, and deteriorated in technologically more advanced manufacturing exports in 1987-2006. The major determinants of this competitive position are found to be "real" factors, such as productivity rather than price related factors. The observation is the same in the services; strong comparative advantages exist for Turkey in 2010 for construction, tourism and transportation sectors, but finance, insurance, communication and IT sectors appear to be weaker compared to the EU (Hiziroglu, Hiziroglu, & Kokcam, 2012). In assessing competitiveness by the performance of exports, Turkish exports have performed well on average over the last decade.

The key challenge of the Turkish economy is to increase the value-added of its exports and to increase the technological level of its production. Technology is always connected with high value-added, but the opposite is not always true. For example, in the world of automotive value-chains,

highest value-added segments are related to production design, which is high-tech, and marketing and distribution, which are low-medium tech segments. The solution of Turkey is to integrate into global production channels (Bard, 2013). The transformation of Turkish economy and its trade structure are similar to that of other emerging market economies. Although the share of vertical specialization in trade is still relatively low compared to other emerging economies, Turkey was able to increase its share by more than 60 percent in 1995-2005. Changes in not only regarding the firms' competition strategies but also in the sectoral composition of exports resulted in the increase in vertical specialization in Turkish trade. Trade liberalization in the 1980s and 1990s that allowed Turkey to increase business contacts with world production networks, resulted in shifting resources from traditional sectors such as textiles and agriculture towards the non-traditional high-technology intensive sectors such as transport vehicles and consumer electronics. In this respect, it is not a coincidence that the expanding sectors of the 1990s and 2000s are the ones that perfectly suit production fragmentation and global supply chains. These aforementioned high-technology intensive sectors are also the ones that were successful during the so-called crisis era of Turkey (1994-2001) and became the engine of Turkish economic growth.

Most R&D activities in Turkey are an adaptation of new processes and products. The realization of technology transfers is the critical condition of production and the export performance of Turkey (Bard, 2013). Currently, main types of technology transfers to Turkish channel through a foreign firm to a Turkish company or an existing subsidiary, or by the purchase of patents. Trade remained the main channel of technology transfers to Turkey that can thus be tracked in the import of equipment. However, even with favorable trade policies, the FDI appears to be the future optimal channel for technology transfers and accumulation of technologies.



### 3.2.1 Main Features of Turkish Trade with The EU

In absolute values, trade of Turkey with the world is multiplied within twenty years. The dynamics of the EU trade with Turkey indicates the same trend until 2004 (Figure 15). After 2004, the EU share dropped below 40 percent in 2012. However, until 2008, global trade of Turkey was still increasing; after 2008, it is hit by a crisis. That means that after 2004 the EU trade with Turkey was affected by the crisis in the EU and by strong competitors such as Russia, China, Ukraine, Gulf countries, South Korea, Singapore, Mercosur and Canada. From 2012, main import partners of Turkey are as follows: EU27 37.1 percent, Russia 10.3 percent, China 8.2 percent, USA 5.4 percent, Iran 4.6 percent, India 2.3 percent and South Korea 2.2 percent. The main export partners of Turkey are: 39.7 percent EU 27, 5.4 percent Iraq, 5 percent Iran, 4.1 percent UAE, 3.3 percent Russia, 2.8 percent USA, 1.8 percent Saudi Arabia and Egypt. In 2012, Turkey represented respectively 2.7 percent and 4.5 percent of the total imports and exports of the EU.

*Figure 15: Trade of Turkey with the World and the EU28*

Partners	WORLD	EU28	EU/WORLD*	WORLD	EU28	EU/WORLD*
	EXPORT (USD billion)		EXPORT(%)	IMPORT (USD billion)		IMPORT(%)
1991	13.6	7.6	55.9	22.9	10.8	47.2
2001	31.3	17.8	56.9	41.4	19.8	47.8
2007	107.3	61.7	57.5	170.1	70.7	41.2
2012	152.3	60.4	39.7	236.5	87.7	37.1

Source: UN Comtrade

A detailed analysis of Turkey's trade by EU shows that volume of trade in the stagnation period (1991-2001) is mainly directed towards Turkey's traditional partners: Germany, France and UK, Netherland and Belgium. From the EU8 partners, Italy ranks second, followed by Spain and Romania, and further by Greece and Bulgaria. During the take off and the crisis periods, this ranking remained stable. The EU8 countries represent every year the half of the top ten partners of Turkey, with a trend to improve this ranking for EU exports.

The EU8 countries resisted better to competition and the share remained stable between 10 percent and 20 percent of total trade. After 2008, the EU8 countries performed better with decreasing export share of Turkey, and increasing share of imports towards Turkey. When considering the whole period, trade of Turkey with the EU8 countries is more dynamic than with the EU27, and as dynamic as with the whole world. Although smaller in volume, the most dynamic trade partners are Croatia, Bulgaria, Ireland, Romania and Spain. Turkey is a booming market for all the EU8 countries, with a long-term import growth rate of 15 percent or more. With 10 percent, only Italy has an import growth rate lower than the EU average; however, Italy is the most important partner in volume, twice more than Spain. For Turkish exports, Croatia, Romania, Bulgaria and Ireland have 15 percent or more long-term growth rate.

Analyzing the trade in volume of Turkey with the EU8 countries, one observes a high stability of hierarchy for the partner countries between 1991 and 2012, despite changing economic conjunctures. For both exports and imports, Italy leads, followed by Spain and Romania; while Greece and Bulgaria remain quasi-equivalent. Ireland, Portugal and Croatia are ten times less than Spain, and twenty times less than Italy. It should be noted that Italy and Spain are top partners of Turkey for trade and for FDI as well, showing that with the EU8 these two types of economic relations go together. Another feature is that trade follows economic weight of countries, except Greece that is under-represented. This reveals that trade between Turkey and Greece has a potential of further development.

For the period 1991-2012, commodity structure of the total exports of Turkey was dominated by three main categories of goods: intermediate goods (29 percent of total exports); machinery and transport equipment (25 percent of total exports); manufactured articles (20.7 percent of total exports).

The commodity profile of import side of Turkey is more diversified: machinery and transport equipment (30.3 percent of total import);

intermediate goods (17 percent of total import); mineral fuels; chemicals (13.2 percent of total import); other commodities (gold).

This trade commodity structure is typical of countries with intermediate development level, buying equipment and related intermediate goods and selling less technological equipment and goods to less developed third countries (Middle East and CIS).

According to HSBC analysts, the sector of infrastructure (goods for infrastructure and investment equipment) is highly promising given the demand of equipment for growth in the developing world.

Commodities structures of the exports of Turkey towards the EU28 and globally are very similar. The main difference is a higher share of equipment and manufactured goods in the exports of Turkey to the EU28. As for the imports of Turkey, the share of equipment and chemicals imported from the EU28 is higher, as well as the share of fuels imported from outside the EU28. The intra-branch profile of the EU trade with Turkey is apparent for equipment since the end of 1990's, and for manufactured goods.

This comparison shows that Turkey is selling to the EU high value-added equipment and chemicals, and is selling outside the EU less technological equipment and manufactured goods.

With the EU, imports from Turkey have the same profile during the whole period and with individual EU countries: about 40 percent of equipment, 20 percent of chemicals and 20 percent of intermediate goods. Thus the EU is the main workshop that is modernizing the Turkish economy. As for equipment, main suppliers are Germany (20 percent among EU for the branch), Italy and France (10 percent), and Spain and UK (5 percent). The exports of Turkey are the same for all the EU countries: equipment, intermediate goods, and manufactured articles. The most striking change is the increasing share of equipment in the Turkish exports to the EU, from 10 percent in 1996 to 35 percent in 2012. Since 2004, equipment is the first sector in the Turkish exports to the EU that is an unusual situation.

Commodity profile of Turkish trade is that of a country with industry basis and mainly focused on its modernization. Infrastructure is the dominant mega sector, benefiting from the EU inputs for Turkey's modernization, and aiming also at meeting the huge demand of developing countries. The EU will continue to provide Turkey with the technologies and high-quality production goods, but this flow is not one-sided: for iron and steel, road vehicles and machinery heavy trade flows exist for both imports and exports, revealing intra-industry trade with vertical specialization. Machinery and transport is for historical time the first export sector of Turkey to the EU with the share of 30 percent.

### **3.2.2 Bilateral FDI Relations Between EU8 and Turkey**

Foreign direct investment (FDI) is a significant component of globalization process whereby through internationalization production processes are increasingly fragmented and scattered across the world, next to global financial flows and portfolio investments. The accelerated global growth of FDI stocks and flows point to the fact that internationalization of business activities is becoming increasingly demanding, for example FDI is often used to bypass barriers to trade by businesses among other reasons. Debates about its advantages, business or policy contexts are covering a large spectrum, and further debates abound. However, the ongoing debate does not change the realities of day-to-day business transactions of TNCs, mergers and acquisitions, and cross-border investment activities over-all.

Currently, the global question of competitiveness coupled with the recent trend on being part of global value chains or not is also accelerating. These trends, in return, have already commenced a competition among the countries to improve their global economic standing through attracting FDI, while coping with the realities of domestic economic conditions, which cannot be dealt in isolation in a globalized world. Consequently, globally

countries are competing for attracting FDI for a variety of reasons covering a large spectrum from employment, finance, R&D, growth, and so on.

The European Union and its member states are not immune to these global trends, and the EU as a major global economic player has a considerable place in global investment environment. Turkey, on the other hand, a candidate country to the EU with also Customs Union Agreement as of 1996, is a fast growing dynamic economy. Due to its proximity and candidate position, it is a significant economic partner for several individual EU member states. As a most recent trend, Turkish businesses have also begun to be investment partner for EU businesses with outward FDI accelerating towards the EU member states.

In a recent opinion piece, Antonio Tajani, Vice-President of the European Commission and Commissioner for Industry and Development highlighted the fact that globalization is a window of opportunity for European industries instead of being a threat. Tajani said further: *“One way that globalization allows the EU to maximize the competitiveness gains are through value chain positioning (...) Value chain performance is becoming a more important measure of competitiveness than traditional focus on exports of final products.”* (Ernst & Young, 2013).

FDI is globally accepted to be among the main drivers of competitiveness, growth and development as part of the economic globalization process. According to statistical evidence of UNCTAD and IMF, during the last decade, covering the years 2000 and 2011, the global FDI increased by 9 percent annually on the average, which created a strong parallel with global annual growth average of 7 percent for the same period.<sup>94</sup>

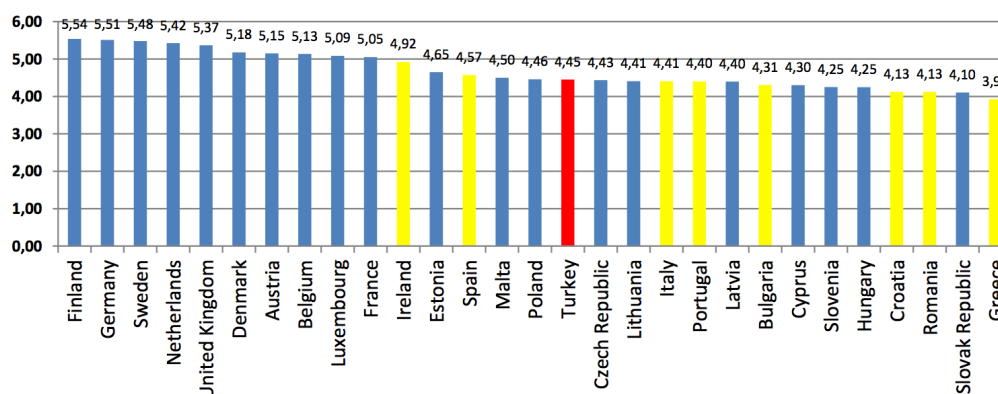
As it is seen in Figure 16, in terms of overall competitiveness scores, Turkey ranks 16<sup>th</sup> among the EU28 while the country ranks 3<sup>rd</sup> after Ireland and Spain among the focus group of the EU8. A closer look into the competitiveness scores indicate, with reference to the performance of

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<sup>94</sup> Global Agenda Council on Global Trade & FDI 2012-2014, World Economic Forum.

individual countries within the context of their performances in underlying subcomponents of this Index, that possibility of creating synergies between EU8 and Turkey is high and it needs to be further explored.

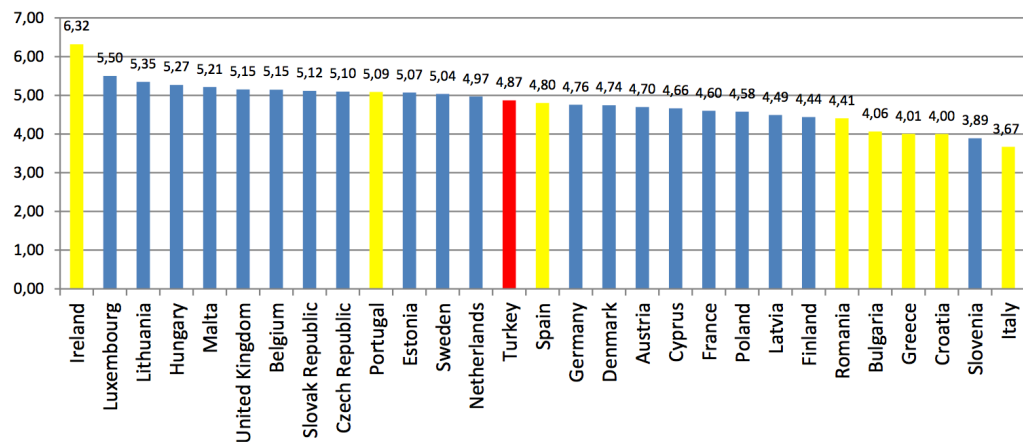
*Figure 16: Global Competitiveness Scores of EU28 and Turkey, 2013-14*



Source: WEF data

In addition to the general outlook of competitiveness, another exemplary component of the Global Competitiveness Index, is FDI and technology transfer. In the era of globalization, technology is an important factor for enhancement of productivity but the main issue is that firms in a given country need to have an access to advanced products next to the ability to use them. In this context, FDI plays a central role as a source of foreign technology and a clear indication of this aspect can be observed in the recent acquisitions of Turkish firms in Europe whereby some firms carried all the physical production assets including technological know-how and patents into Turkey. The figure below (Figure 17) indicates the extent, which FDI brings in new technology into the individual countries. According to the results, with a score of 6.52 out of 7, Ireland ranks first in terms of FDI being the main source of technology transfer, followed by Portugal and Turkey with reference to EU8 focus group. This can be considered as another indicator for the potential of creating synergies between the EU8 and Turkey, given that Turkey scores 14<sup>th</sup> among EU28 and 3<sup>rd</sup> among the EU8.

Figure 17: FDI and Technology Transfer Scores of EU28 and Turkey, 2013-14



Source: WEF data

Finally, another important component to highlight for the purposes of current study vis-à-vis participation in GVCs and attracting FDI as well as the internationalization of SMEs is the state of cluster development. Cluster development is mostly considered as an important driver for economic growth.

In terms of participation of SMEs to GVCs and their internationalization prospects, cluster development is already part of industrial policies of several countries; Italy is one of the leading countries in the world in clusters and this partially explains its successful integration to various GVCs and also its relative success in FDI. Globally, Italy ranks 2<sup>nd</sup> in terms of cluster development state, the closest global follower being Ireland ranking 21<sup>st</sup>, followed by Turkey as 30<sup>th</sup> within the focus group of EU8 and Turkey.

*Global Competitiveness Index* (GCI) is made up of several subcomponents that are directly relevant to assessment of FDI position and attractiveness of the individual countries. The index is recognized internationally as one of the measures of GVC participation performance for individual countries as well. According to the results derived out of GCI and its subcomponents, including value chain breadth, FDI and technology transfer, state of cluster

development, it is possible to see that Turkey is in comparable position to EU8 and is performing better than some of the EU8 in these indices. The overall results also indicate the potential to create synergies as well as parallel areas of improvement.

World Bank-*IFC Doing Business Index*, like the GCI is considered internationally as one of the measures of GVC participation while simultaneously providing a benchmark for FDI competitiveness of individual countries. According to the results of the Index, Turkey is in 5<sup>th</sup> place after Ireland, Portugal, Spain, Bulgaria within the EU8 although there is a considerable gap between Ireland and Portugal on the one hand, and others. Although both GCI and Doing Business Index are arguable subjective as they depend on surveys, they nevertheless provide an important benchmark in terms of investment decisions of the businesses. And with the rise of GVCs, as measure of GVC performances of countries, their significance is on the rise.

### **3.2.3 SWOT Analyses of Existing Business Environment between EU8 and Turkey towards Future Path Ahead**

As a result of the business interviews with firms from EU8 member states and Turkey, the following SWOT analyses results have emerged.



### *SWOT Analysis for Inward FDI to Turkey*

<b>Strengths</b> <ul style="list-style-type: none"> <li>▪ Size of domestic market</li> <li>▪ Skilled workforce</li> <li>▪ Developed services sector (especially financial services and banking)</li> <li>▪ Productivity</li> <li>▪ R &amp; D capabilities</li> <li>▪ Quality of infrastructure</li> <li>▪ Quality of ICT infrastructure</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>▪ Regulations and red tape</li> <li>▪ Swift changes in rules and regulations</li> <li>▪ Lack of coordination among business organizations in facilitation of FDI</li> <li>▪ Language barrier</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>▪ Proximity to neighbouring markets</li> <li>▪ Growth potential of Turkey</li> <li>▪ Potential cross-sectoral spillovers</li> <li>▪ SME internationalization</li> <li>▪ Participation in different sectoral clusters</li> <li>▪ Extension of sectoral value chains</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>▪ Global economic crisis</li> <li>▪ Political turmoil in neighbouring regions</li> </ul>

Majority of the existing EU8 investors perceive several advantages in investing in Turkey. While the advantages cover a large spectrum, the weight and significance of these advantages vary across the invested sectors due to the sectoral characteristics. For example, in financial services the ICT infrastructure and R&D capabilities in Turkey came to forefront together with skilled workforce. In niche sectors, participation in sectoral clusters is highlighted more, especially from view point of SME internationalization. There are also interesting cases in mining sector, which further created cross-sectoral spillovers in investments. In the manufacturing sector, next to market expansion, a strong motive is to enhance the already existing product value chains. On the overall, Turkey is perceived as a recommended investment hub by the existing investors due to several strengths and opportunities as indicated above.

*SWOT Analysis for Outward FDI from Turkey into EU8  
(Valid mostly for Italy, Spain, Greece and Portugal)*

<b>Strengths</b> <ul style="list-style-type: none"> <li>▪ Favourable investment environment</li> <li>▪ Quality of infrastructure</li> <li>▪ Access to know-how</li> <li>▪ Strong brands</li> <li>▪ Logistical advantages</li> </ul>	<b>Weaknesses</b> <ul style="list-style-type: none"> <li>▪ Regulations and red tape</li> <li>▪ Relatively less dynamic business culture</li> </ul>
<b>Opportunities</b> <ul style="list-style-type: none"> <li>▪ Access to the EU market</li> <li>▪ Euro crisis</li> <li>▪ Participation in sectoral clusters</li> <li>▪ SME internationalization</li> </ul>	<b>Threats</b> <ul style="list-style-type: none"> <li>▪ Euro crisis</li> </ul>

For Turkish businesses investing in the EU8, the motives behind investment and the weight adhered to advantages cover a large spectrum and also vary across sectors like the EU 8 counterparts. However, the main theme is market-seeking FDI in most of the cases, followed by efficiency seeking FDI. Entry into EU8 markets usually mean for Turkish investors increasing their market potential towards the EU market as a whole, while acquisitions in manufacturing sector, for example, are geared to technology transfers. Brand acquisition emerges also as a strong trend with a view to enhance market expansion. Majority of the Turkish investors see Euro crisis as a window of opportunity for investing in the EU8 countries, most notably, Italy and Spain. Investments in services sector have begun to emerge as a strong trend for the new member Croatia as well as Greece.

As a common ground for both inward FDI from EU8 to Turkey and outwards FDI from Turkey to EU8, all the interviewed businesses recommend investing in the respective countries, while also emphasizing the future potential.

### **3.3 Turkey's Participation in GVCs**

GVCs have changed the shape of international trade, creating increasing competition and codependency between countries. With the dramatic growth of outsourcing practices, competition between companies has shifted from being horizontal to being vertical. Firms are at the same time competitors and sources of key inputs and competences to each other, in fact, lead firms may compete on specific tasks with their own first-tier and lower-tier suppliers while the latter may evolve from 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.

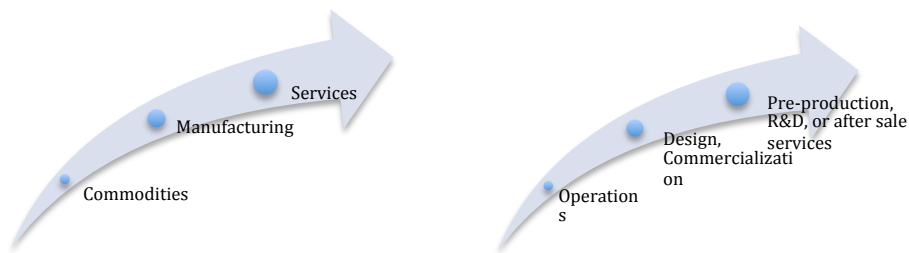
In an attempt to improve the performance in any or all aspects of their product-cycles, firms choose different combination of in-house production, offshoring, and outsourcing. The motives for offshoring and outsourcing for the strategic firm range from the pursuit of greater flexibility, the diversification of location, the reduction of corporate risk and the operation in a more fast business environment. Therefore, 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. 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.

Firms' location decisions are becoming more "task-specific" and less "sector-specific". Within a GVC, countries tend to specialize in different stages of production; 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 (Grossman & Rossi-Hansberg, 2008).

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 stands for evolving in terms of sectors and focusing, instead, on economic upgrading through moving-up the value chains. Figure 18 shows 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 (United Nations Industrial Development Organization (UNIDO), 2009).

*Figure 18: From sectors to task-based development strategies*



*Source: Cattaneo, O., Gereffi, G., Miroudot, S. and Taglioni, D., (2013) – 'Joining, upgrading and being competitive in global value chains: a strategic framework'.*

As stated by John Humphrey (Humphrey, 2004), there are four distinct types of upgrading. These are process upgrading, product upgrading, functional upgrading and intersectoral (or chain) upgrading. 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.

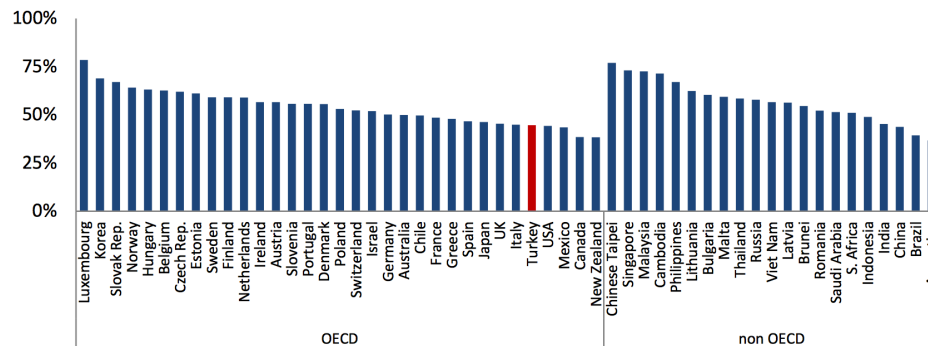
In this case, it is emphasized the importance of functional upgrading and development: that is, moving into higher value added activities within the value chains. From the point of view of the firms, this can be done in two ways: seeking upgrading opportunities or by consolidating and bundling tasks within the value chain. In many chains, the value added lies with the intangible activities or services, indeed, 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.

Turkey's participation in GVCs is comparable with other middle-income countries. The participation index<sup>95</sup> 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 19). It finds that Turkey's participation rate is just below 50 percent, 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 might seem surprising but 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.

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<sup>95</sup> Koopman, Robert, William Powers, Zhi Wang and Shang-Jin Wei (2011): 'Give Credit Where Credit is Due: Tracing Value Added in Global Production Chains'.

Figure 19: GVC participation index in OECD countries and selected non-OECD economies, 2008



Source: OECD (2012)

Turkey specializes in the “center”, which means 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, as the center of the value chain, or in downstream components, depending on its specialization. Countries specializing in upstream activities 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 (The World Bank, 2014).

Indeed, it strongly participates in manufacturing GVCs for chemicals, basic metals, textiles and transport equipment mainly due to the sourcing of intermediates from abroad (OECD, 2013).

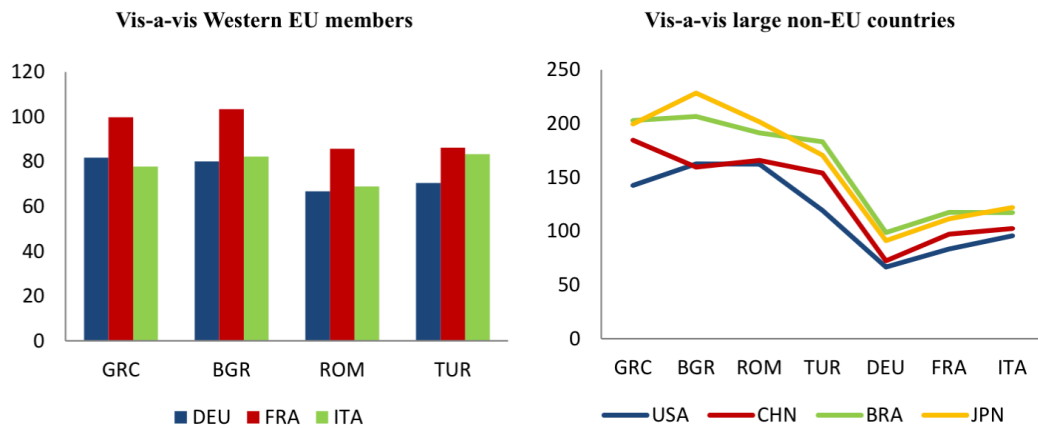
Turkey is a preferred destination for final assembly platforms. Other countries in this same category are the Dominican Republic, Honduras and Mexico in the Americas; Germany, Hungary, Slovakia, Slovenia and Tunisia in the European and Mediterranean region; China, Cambodia, Thailand and Vietnam in Asia. This is consistent with the findings from

similar studies using alternative methodologies; for example, 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 also to other sectors (The World Bank, 2014).

One of the 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. Higher bilateral trade costs result in smaller bilateral trade flows (Anderson, 2002).

As figure 20 shows, Turkey has relatively favorable (low) trade costs when compared to competitors in the region.

Figure 20: Bilateral trade costs for Turkey and comparator countries



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

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 instead, 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. 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.

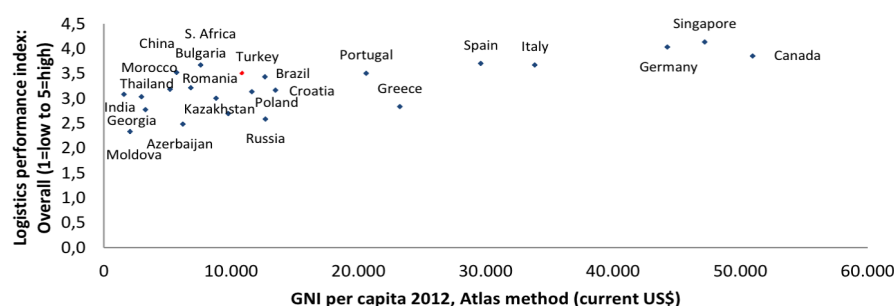
Low trade costs are reflected in Turkey's relatively good logistics performance. The performance of international supply chains is measured using the Logistic Performance Index (LPI). It is based on the assessment of logistics professionals located in the country's major trading partners, and is a weighted average of six components<sup>96</sup> that are critical for logistics

<sup>96</sup> 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.



performance. Turkey is the 27<sup>th</sup> in global rankings, just below China; the comparison is even more favorable when 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 21). The good logistics performance of Turkey is an indication that connectivity and supply chain related reforms and improvements have been successful.

*Figure 21: Turkey performs better than countries with a similar per capita income*



Source: LPI 2012

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 and this represents greater opportunities for upgrading along the value chain.

In this context, in order 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, according to a weighted average of the length of the production involved in these sectors. This is measure from input-output tables, which allow inferring the number of plants involved sequentially in production. In particular Fally computes a measure of the average number

on 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.

For example, with an index of 3.1, TV and communication equipment is the longest industry on average. It is immediately followed by motor vehicles (index 2.8). Moreover, a range of industries have an index of about 2.5 and these include important ones for the Turkish economy such as non-electrical machinery and its main input: fabricated metals, textiles, leather and footwear, and food. 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.

Longer value chains offer countries more opportunities for upgrading, and through it changing substantially the structure of their trade and output.

However, each value chain is different and has specific characteristics and dynamics that 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.

Hence, while the aggregate analysis is useful to describe general trends, it is worthwhile to study in detail selected representative sectors. Following, the motor vehicles, textiles and agro-food sectors will be studied, and for each one, there will be an overview of the functioning of typical value chains together with a discussion on 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 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.

### **3.3.1 Motor Vehicles**

The automotive industry is an example of a complex value chain where most of the value 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<sup>97</sup>, 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.

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 even if initially Renault considered Turkey as a potential location for its design and development activities. Then, it decided to shift the bulk of its operations to Romania, a decision presumably linked to its EU membership and proximity.

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<sup>97</sup> Mudabi (2008), highlighted that value creation in value chains usually takes a U (smiley) shape, with the value created at the extreme of the smile, i.e. in pre-production or in post-production. At the center of the value chain, where manufacturing and standardized services take place, there is little knowledge creation compared to the extremes.

Having a history of more than 50 years, automotive industry in Turkey has started as assembly operation in the beginning 1960. After five decades the industry has not become only a production base of many international OEMs but also an engineering hub. Today, with its high added value and employment creation combined with the contribution to the tax revenues and balance of payments, Turkey's automotive sector is one of the key sectors that propel the country's successful economy.<sup>98</sup>

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. The second most important stage of the Turkish automotive value chain in terms of value of exports is standard input production, which account for one-fourth of total exports.

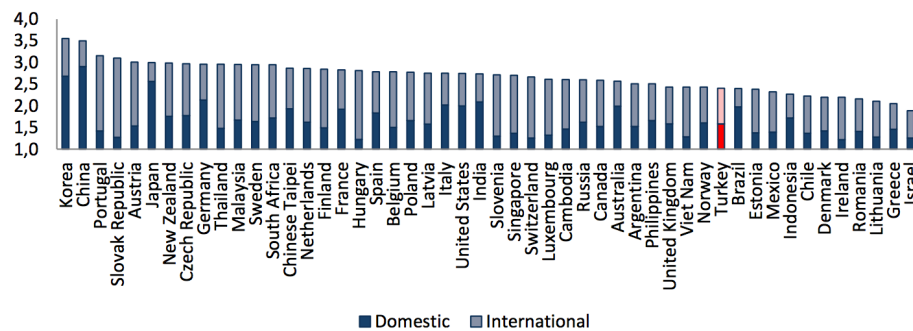
Something different emerges when production measured by value added is considered. By 2009, exports of standard inputs surpassed that of final goods by more than ten percentage points. Exports of main parts and components displayed the greatest increase, albeit with a declining share in value added. 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 (The World Bank, 2014).

According to the OECD (2012), 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 22).

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<sup>98</sup> ISPAT: 'The importance of automotive industry for Turkey', at <https://www.globalsuccess-club.net/ispat>.

Figure 22: Length in value chains in the motor industry by country, 2008



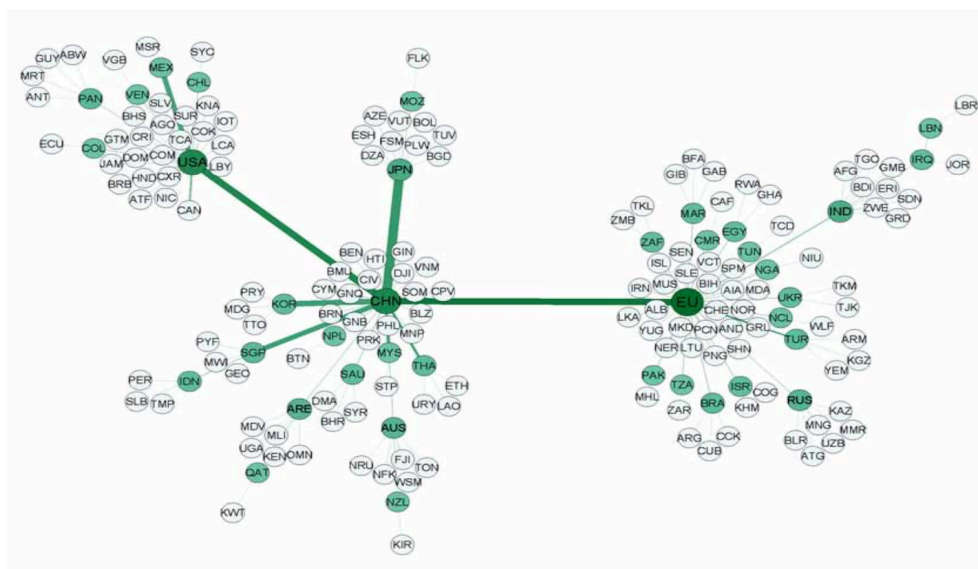
Source: OECD (2012)

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.

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 23)

*Figure 23: World Network of intermediate goods (BEC classification, 2010).*



Source: COMTRADE

The product portfolio of automotive manufacturers in Turkey covers a range of vehicles from sedans to heavy trucks. Using the advantages of its low-cost and highly skilled workforce, dynamic local market and geographical location, Turkey has been able to increase its vehicle production from 374,000 in 2002 to over 1,073,000 in 2012. On average, the vehicle production grew by 11 percent annually in the same period of time.

Finally, with these performances, Turkey has become the 16<sup>th</sup> largest motor vehicles manufacturer in the world, especially for the production of commercial vehicles, it has already become a center of excellence.

Within this picture, the Investment Support and Promotion Agency (ISPAT), has developed its own strategy for the automotive sector, which is in line with the strategy document of the Turkish government. The goal is to attract the investment that would contribute to the competitiveness of industry in the global competition. ISPAT is approaching selected global OEMs and suppliers to create awareness on how Turkey can contribute to

their competitiveness; given that, costs, talent and proximity to demand markets are the key factors affecting the competitiveness of a company and Turkey, with its long production experience in automotive industry accompanied with the engineering skills, the geographical location and the easy access to emerging markets nearby, it offers the right conditions to invest.<sup>99</sup>

### **3.3.2 Textiles and Apparel**

The textiles and apparel industry has a buyer-driven supply chain. After the phasing out of the Multifiber Agreement in 2005<sup>100</sup>, the industry has become very competitive due to the low barriers to entry and the low reliance on 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 provide to product niches in the main consumer markets (Gereffi & Memeodovic, 2003).

The sector is less regionally concentrated than the automotive industry, although Turkish exports are mainly directed to EU-15. Global buyers

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<sup>99</sup> See at footnote 98

<sup>100</sup> The MFA is an international trade agreement on textile and clothing that was active from 1974 till 2004. The agreement imposed quotas on the amount that developing countries could export in the form of yarn, fabric, and clothing to developed countries. Under the MFA, the US and the EU restricted imports from developing countries in an effort to protect their own domestic industries. Each developed country was assigned a quota or quantities of a specific item which could be exported to the US and EU. At, <http://www.investopedia.com/terms/m/multi-fiber-arrangement.asp>.

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. As Fernandez-Stark and others mentioned, 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, labor fairness, and environmental standards (Fernandez-Stark, Frederick, & Gereffi, 2012).

The sector has a relatively long value chain. As shown in the previous figure 18, the textiles sector has the sixth longest value chain with a value of over 2.5. 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.

The Turkish textile exporters tend to concentrate in the final stage of textile production. In 2008, Turkey was the 3<sup>rd</sup> most important global exporter of apparel after China. About 70 percent of the export value and over 50 percent of value addition was generated by final goods exports in 2010. 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. 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 final segment of the value chain



dominates both exports and value added. Building on the traditional strength of Turkish textile and apparel manufacturers as “full package suppliers” to global brands, Turkish manufacturers of textiles and apparel have more recently succeeded in transitioning and upgrading toward product design and product brand activities, but as expected, textiles and apparel products are all low- and medium-tech products.

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 center, with the target for it to become the fifth global fashion center by 2023. Tight relationships of local manufacturers with large global retailers such as Marks & Spencer (M&S) facilitated upgrading into design services. 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 collaboration between 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 is the next step, after own design was supported by the Turkish government, which granted incentives for firms willing to upgrading into branding. These incentives include reimbursement 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 (Fernandez-Stark, Frederick, & Gereffi, 2012).

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. 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.

### **3.3.3 Agro-food**

The resource-based food industry is characterized by low appropriation 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.

The agro-food value chain is also buyer-dominated, but is shorter than 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. 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 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 food (raw material), is smaller than in textiles and automotive, possibly reflecting simpler value chains.

The majority of the exporters specialize in finished products, in fact, 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, final products or raw materials generate 80 percent of the total. Both are mostly exported regionally, 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.

While new machinery is one important way to increase value addition in the agro-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. 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.

The food sector ranks among the top ten exporters in the world for several different raw and/or processed food products. According to FAO data in 2010<sup>101</sup>, Turkey was the largest world exporter of raisins, dried apricots and dried figs, the second largest world exporter of wheat flour, pasta, prepared walnuts, poppy seeds and lemons, and the third largest world exporter of concentrated apple juice, fresh apricots, yogurt, pickled vegetables, citrus fruit, lentils, and cherries. Turkey is also among the top ten world exporters of fresh tomatoes, various preparations of cereals, table olives, tomato paste, industrial bakery and pastry products, cream cheese, margarine and virgin olive oil.

Turkish agro-food trade is based on crop products. Trade in livestock products remains negligible. Hence, Turkey is far from considering the full development of agro-food trade. Supported by the increasing productivity of policy measures promoting agricultural trade liberalization, the operating margin of fruit and vegetable exporters will be expanded. Finally, the ability

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<sup>101</sup> Faostat: <http://www.fao.org>.

of the agro-food sector to compete with imports and international markets would increase its potential (Tozanli, 2014).

### **3.3.4 Spillovers from Global Production Networks**

The integration of Turkish firms into international production networks has the potential to influence the Turkish economy through multiple spillovers. By applying the Farole and Winkler framework<sup>102</sup> to Turkey, it can be presented an analysis of the potential spillover effects. Farole and Winkler assessed how foreign investor characteristics (e.g. inputs and technology), domestic firms' absorptive capacity and a country's institutional variable influence intra-industry productivity spillovers to domestic firms from FDI as a proxy for GVCs; FDI presence is a coarse but useful proxy and 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.

Anyway, the researchers used a cross-section of more than 25,000 domestic manufacturing firms in 78 low and middle-income countries from the World Bank's ESSs.

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

The analysis specific to Turkey suggests that 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

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<sup>102</sup> The framework (2012) refers to the policy research about 'Foreign firm characteristics, absorptive capacity and the institutional framework: the role of mediating factors for FDI spillovers in low- and middle-income countries'.

FDI and the fully foreign owned firms drive the effect. Second, on the absorption capacity side, firms that are relatively close in productivity to the median foreign firm benefit most from FDI presence. High export intensity, larger size, 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. Finally, 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.<sup>103</sup> Estimating the effect of full versus partial foreign ownership shows that fully foreign-owned firms drive these effects.

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. 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 sufficiently high starting levels of productivity enhance absorption. 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. Havrek and Irsova (2011), found evidence for

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<sup>103</sup> The Hirschmann-Herfindahl Index is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers. The HHI number can range from close to zero to 10,000. The closer a market is to being a monopoly, the higher the market's concentration and the lower its competition.

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.

### **3.3.5 Turkey with Rising Business Confidence: Participation in GVCs and FDI position**

According to the most recent Eurochambres Economic Survey, while the business confidence in the EU countries is declining, it is on the rise in Turkey.<sup>104</sup> The survey indicates that Turkey is among the top countries in business confidence within the scope of EU8 and it also remains among the optimistic countries for investment in extra-EU.

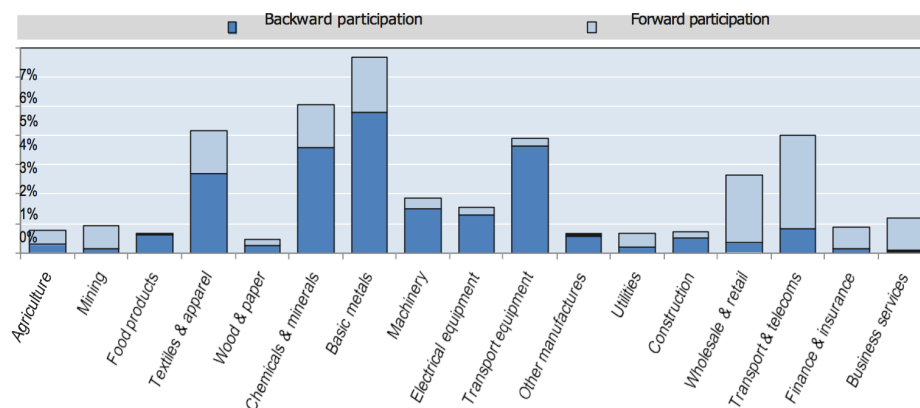
According to the OECD, the overall participation of Turkey is roughly around 40 percent, with 25 percent backward and 15 percent forward participation positions.<sup>105</sup> As for sectoral distribution of this participation, Turkey participates in manufacturing GVCs for chemicals, basic metals, textiles and transport equipment while also indicating a higher participation in a number of services sectors such as wholesale, retail, transport and telecommunications services (Figure 24).

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<sup>104</sup> Eurochambres Economic Survey 2015, [http://www.eurochambres.eu/objects/3/Files/EUROCHAMBRES\\_Economic\\_Survey\\_Report\\_2015.pdf](http://www.eurochambres.eu/objects/3/Files/EUROCHAMBRES_Economic_Survey_Report_2015.pdf).

<sup>105</sup> A backward participation in GVCs means the use of foreign intermediates in a country's exports, whereas forward participation means use of a country's intermediates in other countries' exports.

Figure 24: GVC Participation of Turkey by sectors



Source: OECD, May 2013

As the manufacturing sector exports increasingly includes value added from service sector vis-à-vis efficient functioning of GVCs, it is also important to see the case of Turkey in this context.

This is also because almost one third of value of Turkey's manufacturing sector exports represents a services value added constantly increasing as of 1995 up until 2009 and beyond; more specifically to a larger extent in terms of distribution services, followed by business services. There is only one exception to the rule in manufacturing sector for Turkey, that is, the food products, according to the OECD data.

According to Ernst and Young Survey, Turkey has been in contrast with the global FDI trends in terms of FDI inflows in 2011 with an increase of 76 percent between 2010 and 2011. In 2011, the value of its Greenfield investments reached USD 10.3 billion. However, in 2012, a decline of cross-border M&A sales driven inflows to Turkey dropped by 33 percent, which is less than Europe that is 36.1 percent (Ernst & Young, 2013).

The FDI projects in Turkey spread across the entire value chain. Turkey received both industrial and services sector projects although the services activities count more. Knowledge-driven sectors such as business services, ICT, and financial services generated more than one-third of the FDI



projects in Turkey with 36 percent during this period, while services sector generated 63 percent of the projects.

The source of the FDI projects in Turkey is mainly Europe with an overwhelming 46.3 percent, followed by North America with 14.7 percent, and Central and Eastern Europe with 2.1 percent. Turkey's competitors in attracting FDI are Spain, Portugal, Greece and Romania respectively. Business leaders consider the most significant assets of Turkey in attracting FDI as market opportunities, large domestic market, and reasonable labor cost.

### **3.4 Challenges and Policy**

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 (The World Bank, 2014): 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 exports success has been driven by large, established firms, while 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.

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 measure 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. In order to upgrade its exports, Turkey will face four different challenges that currently limit the productivity growth. First, attracting larger inflows

of FDI particularly into manufacturing and tradable services is critical because of the transfer of technology from foreign partners 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. 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.

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.

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 that will be analyzed below.

#### **3.4.1 Boosting FDI**

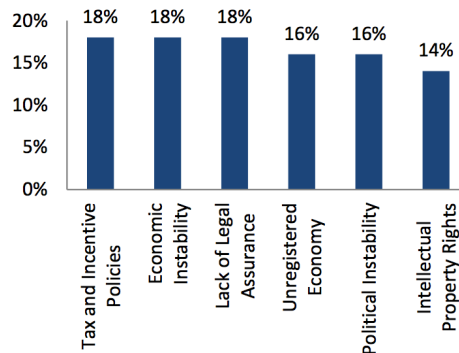
Foreign-owned firms tend to be more productive than predominantly domestically owned companies in developing countries since they operate

with more advanced technologies and skills. In addition, FDI plays an important role in increasing product quality and diversity in the host economy. According to the UNCTAD FDI potential Index, Turkey ranked 80<sup>th</sup> in the world in 2009, while its FDI performance ranked 108<sup>th</sup> in 2010. 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.

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.

Dumludag (2009), found that the main motive of multinationals coming to Turkey is horizontal. A survey of 52 multinationals in Turkey from different industries suggested that 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. The main recipients of asset-seeking FDI are mostly developed countries and Dumludag suggested that Turkey does not yet have capability to attract asset-seeking as well, while Czech Republic and Hungary have started to attract more investment in this category. According to surveys regularly conducted by International Investors Association (YASED), the main barriers to FDI in Turkey are macroeconomic (Figure 21). 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 Loewendhal (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.

Figure 25: Main Barriers to FDI in Turkey



Source: YASED Survey 2013. Results from the survey question: “What are the three main obstacles for FDI in Turkey?”

Although there has been progress as measured by various business and competitiveness indicators, 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. The Coordination Council for the Improvement of the Investment Environment (YOIKK) 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.

### 3.4.2 Innovation, R&D and Quality Standards

Adoption of new technology, experimentation, and innovation hold the key to upgrading exports.

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. According to

the Global competitiveness Index of the World Economic Forum, Turkey ranks 56<sup>th</sup> out of 144 countries by corporate spending on R&D. Despite recent progress, Turkey ranks 70<sup>th</sup> in industry-university collaboration and 41<sup>st</sup> in availability of scientists and engineers, all important factors for attracting FDI.

World Bank research suggests that there is room for improvement in Turkey's collaboration between the government, private companies, and universities in areas related to innovation.

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 (The World Bank, 2011).

Turkey's quality certification has increased substantially, thereby contributing to productivity and competitiveness. 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 put Turkey ahead of other middle-income countries, such as Brazil and Poland. However, the percentage 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.

### **3.4.3 Skills and Education**

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. A more educated workforce, essential to adapting new technology, is also likely to attract higher foreign investment into the country. 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. Although this is an improvement from the 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 demand in the business sector are likely to pay off in terms of increased productivity and firm growth.

The level of the skills of the working age population, particularly for women, remains low, albeit significantly improved. The average 15-year old in Turkey is still about one full school year behind the average OECD students. Although the educational attainment of youth is quickly increasing, only 42 percent of the 25-34 year olds have complemented secondary education (40 percentage points below the OECD average).

Reforms are key to lasting skills improvement including reforms to ensure that curricula encompass the full skills set 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 measure to enhance productive employment over the long run. The challenge in higher education is to ensure the quality of the rapidly expanding sector.

Enhancing the skills of the existing labor force is also crucial. 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.

#### 3.4.4 Access to Finance for SMEs

SMEs' access to credit is 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.<sup>106</sup> 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.

Turkish SMEs are faced with onerous collateral requirements and high credit rejection rates. 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).<sup>107</sup>

SMEs access to finance can be improved through robust macroeconomic policies and continued structural reforms of the institutional environment for credit markets. Although recent macroeconomic policies have been appropriate, memories of macroeconomic weaknesses have been a constraining factor and financial institutions began developing their SMEs business in the last decade. Less attention has been given to a supportive institutional framework for SMEs credit markets, as a result.<sup>108</sup>

The ability of financial institutions to assess 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. The ability to present financial information and projections in

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<sup>106</sup> Data from Banking Regulation and Supervisory Authority.

<sup>107</sup> Enterprise Surveys, Turkey (2008).

<sup>108</sup> Turkey Improving conditions for SMEs Growth – Finance and Innovation (2011).

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 Associations, which became operational in 2013, aims to improve the depth credit information on firms and individuals.

Furthermore, a well-functioning secured transaction system would make it easier for SMEs to access financing. There is a mismatch between SMEs' assets and the required collateral by the financial institutions which constraint SMEs' access to finance. Only 22 percent of SME assets consisting of immovable (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 movable 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.<sup>109</sup>

Finally, 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 remains limited.

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<sup>109</sup> Safavian, Fleisig and Steinbuks (2006) showed 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.



### **3.5 Conclusion**

The analysis focusing on the trade and investment potential between Turkey and the EU shows that trade of Turkey with the EU8 is more dynamic with respect to the whole of the EU, confirming good potential of this economic partnership. Although smaller in volume, the most dynamic trade partners are Croatia, Bulgaria, Ireland, Romania and Spain. Turkey is a booming market for all the EU8 countries, with a long-term import growth rate of 15 percent or more.

Mapping trade relations aims at assessing the competitiveness of firms as reflected by international trade and the macro-economic benefits of trade for the participants. When the participants are Turkey, one of the most dynamic and promising emerging countries, and on the other side, the EU or part of it, one of the most developed and sophisticated economic systems globally, the expectations are that Turkey needs as much as possible technologies and the EU firms within depressed conjuncture need access to dynamic and promising markets. If the trade of Turkey with the EU is unbalanced, this does not pose a problem as long as this trade deficit is caused by inflows of technologies, and as long as the deficit can be compensated by similar surpluses with less developed countries.

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. Technology intensive FDI and export-orientation generate the highest spillovers for Turkish firms. Their 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.

## **Chapter 4**

### **Conclusions**

#### **4.1 Turkey's Achievements so far**

Turkey's integration into the European and global economy has brought the country to the threshold to high income. The most significant achievements can be held under several macro areas: trade, finance, enterprise, infrastructure, urbanization, labor markets, welfare and finally public finance.

Turkey's openness has risen from 11 percent in 1970 to 58 percent in 2012. Over the past decade, exports of goods and services in US\$ terms grew by 15 percent annually. Medium-technology exports have increased as Turkey has become more integrated in European production chains. Diversification of exports has allowed Turkey to mitigate the slump in EU demand.

Turkey's banking system is resilient and was the only one in the OECD that withstood the headwinds of the global economic and financial crisis without an injection of public funds. It boasts strong capital buffers and the sector's loan to deposit ratio, while increasing, is only around 110 percent.

Productivity growth has been strong, driven by a re-allocation of the labor force out of agriculture and into services and manufacturing. Patterns of productivity growth are supporting regional convergence within Turkey, although productivity levels in the Western part of the country remain the highest.

Turkey has improved the quality of its infrastructure in transport, telecoms and energy and ranks in the top 30 worldwide for its logistics performance.

This country is one of the world's fastest urbanizers and has created a system of cities that is economically efficient, whilst widening access to municipal services to the whole population.

Employment growth since the 1980s has roughly kept pace with increases in the labor force. Most of the new jobs created have been of higher

productivity, boosting overall growth and social progress. The pace of job creation has accelerated after 2008, when Turkey created more than 4 million new jobs, many of which at higher skill levels.

Health and education outcomes have improved significantly addressing equity as well as access, benefiting also the less well off.

Finally, comprehensive structural reforms in the public sector have supported a sharp and continuing decline in Turkey's public debt to GDP ratio and created fiscal space for improved public services (The World Bank, 2014).

## **4.2 Challenges**

Turkey had many noteworthy achievements that contain lessons for other emerging markets, but since 2012, growth has moderated and the economic activity is expected to remain subdued in the first half of 2015, limiting the full year growth rate to 3.0 percent.

To realize its underlying growth potential, Turkey needs to accelerate structural reforms and improve trust in its institutions. Turkey's main assets include a young, dynamic population, a large domestic market, and a strategic location, combined with strong infrastructure and much improved public services. However, domestic and foreign investors remain deterred by unpredictability and a lack of trust in key institutions. An increase in business investment and innovation as well as in education and skills is needed to boost productivity growth and create enough high-productivity jobs to accommodate Turkey's rapidly growing labor force (The World Bank Group, 2015).

This means that Turkey is still facing challenges that are slowing down its hike toward the high-income status. The particular challenges for this purpose is that Turkish firms are not helping Turkey to increase its productivity. Two possible reasons will be given below.

#### **4.2.1 Poor Management Quality**

Starting from the beginning, Total quality management (TQM) is a firm-wide management philosophy of continuously improving the quality of the products, services, processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance.

In a recent survey of management quality, Turkey ranked between China and Argentina and well below advanced economies. The primary obstacles that the firms in Turkey face were lack of employee involvement, illiteracy and unawareness between the employees, inappropriate firm structure, and lack of the resources. The reasons stand behind the fact that Turkey needs to focus more than ever on increasing the level of education and the participation in the labor market of the youngsters. Higher is their level of skills and higher will be the productivity and performance of the firms.

Furthermore, many SMEs also need to modernize their governance and introduce professional management to improve their ability to absorb and adapt new technologies.

As seen in chapter 1, SMEs represent more than 99 % of all enterprises and absorb the main part of the labor force employed in the business sector but, at the same time, they lag behind European competitors in the field of internationalization. It is well known that Turkey has an urgent need to increase its exports, so it is essential for it to provide companies, especially the smallest ones, with the necessary tools to start operating or to expand into foreign markets. Internationalization, in general, and FDI in particular are associated with more innovation, better management, and higher productivity.

#### **4.2.2 Insufficient Doing Business Environment and Investment Climate**

The burdensome bureaucracy and concerns about rule of law in the country still hold investors back, according to surveys regularly conducted with foreign firms. The 10th National Development Plan 2014–18 focuses on

increasing the productivity and competitiveness of the Turkish economy through improving the overall environment for doing business and the relevant regulatory framework (The World Bank Group, 2015). A series of legal initiatives, including the introduction of a new commercial code, a new patent law, and new income tax legislation, confirm the Government's commitment to improve the business climate. This is particularly critical for SMEs, which account for 80 percent of jobs in Turkey.

The 2013 enterprise survey<sup>110</sup> suggests that high taxes, informality, political instability, and access to finance are the top four obstacles to business in Turkey. The survey suggests that regulatory barriers are highest for SMEs, higher even than for micro-firms.

Indeed, in the *Doing Business* report of 2015<sup>111</sup>, Turkey ranks 55 out of 189 countries, a position that moved from 54 in 2014.

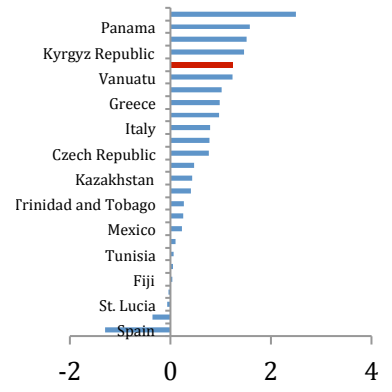
Meantime, Figure 26 tells that, while Turkey is doing enough well on the ranking, it will need to do much better to beat its competitors. The graph below shows the improvement, in percentage points, in distance to frontier for countries that ranked between 75 (Czech Republic) and 50 (Kazakhstan) in ease of doing business in 2014. The graph illustrates that Turkey was among the better improvers in 2014.

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<sup>110</sup> World Bank Group (2013): Enterprise Surveys, at <http://www.enterprisesurveys.org/data/exploreeconomies/2013/turkey>.

<sup>111</sup> World Bank Group (2015): Ease of Doing Business in Turkey, at <http://www.doingbusiness.org/data/exploreeconomies/turkey/>.

Figure 26: Improvement in Distance to Frontier



Source: Doing Business 2014

Improving the business environment is the key, especially for SMEs. However, in order to reach the goal of being among the top 50 countries by 2018, as expressed in the 10<sup>th</sup> Development Plan, the country would need to accelerate the implementation of reforms.

#### 4.3 Decreasing Share of FDI

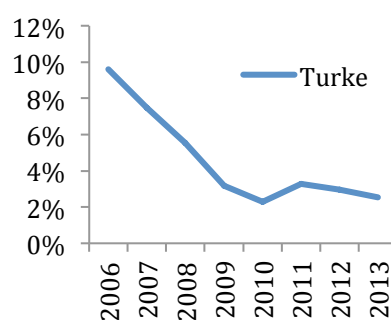
The rise in Turkey's global footprint has been impressive, but it still has a long way to go to reach the levels of exports performance of Eastern Europe or East Asia. Turkey's openness is not much higher than that of much larger economies such as Brazil and India. Foreign Direct Investment (FDI) inflows have risen in nominal terms, but as a share of global flows to emerging markets, Turkey's position today is hardly better than a decade ago (The World Bank, 2014).

Foreign Direct Investment (FDI) has been a driver of growing intra-industry trade as have been the reduction in trade costs that resulted from the harmonization with the EU standards, the elimination of tariff and most non-tariff barriers to trade, and the improvement in Turkey's logistics performance.

While FDI has increased since 2003, Turkey continues to lag behind large emerging market peers in attracting foreign investors.

Figure 27 shows that Turkey is losing its shares in FDI.

*Figure 27: FDI Inflows*



*Source: Country Partnership Strategy of Turkey with the World Bank*

FDI peaked at US\$19.1 billion in 2007, but fell sharply during the subsequent global financial crisis, and has since failed to recover both in absolute terms as a share of total FDI inflows to peer developing countries.

According to surveys regularly conducted by the International Investors Association (YASED), the main barriers to FDI in Turkey are microeconomic. In the most recent survey, lack of legal assurance, economic instability and tax and incentive policies are the top three factors.

But they are not the only one, in fact, FDI inflows, among other things, are driven by human capital and institutions. First, low skills and inadequate level of training impact adversely on the rate of return of FDI, and thus deter capital inflows. Countries with appreciable levels of human capital attract more FDI inflows. Second, because FDI is now a very large share of capital formation in growing countries, the FDI-promoting effect of good institutions might be an important channel of their overall effect on growth and development.



FDI is considered one of the most stable component of capital flows to countries in transition and can also be a vehicle for technological progress through the use and dissemination of improved production techniques.

Turkey prescribed a list of economic reforms to advance its economy beyond middle-income status. This means tackling the two main bottlenecks to growth, quality of human capital and incomplete reform of governance and institutions in order to increase its share of FDI.

#### **4.3.1 Lack of Human Capital**

The quality of human capital in terms of education and training remains a major constraint on growth and innovation in Turkey.

The sophistication of productivity has been linked with human capital meaning that high educational quality is a fundamental plank of a competitive economy.

Turkey has regressed eight places in the latest *Human Capital Index*<sup>112</sup> of the World Economic Forum (WEF), now ranking 68 out of 124 and is the second worst in Europe, after Moldova, and Central Asia.

In Turkey, education system has been insufficient in fully satisfying the needs of the labor market. Ongoing rapid change in the business world requires individuals to attain both vocational qualifications and basic skills. These skills allow individuals to remain longer at work, to increase their productivity in work-life and adapt to changing business and living conditions more quickly. Improving human capital and increasing the effectiveness of labor market will be important policy areas in the implementation of growth strategy in the forthcoming period.

The advantage of having a young population has to be turned into a driver of economic progress. This means boosting participation in the labor force and ensuring that the skills of new entrants as well as existing workers are

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<sup>112</sup>World Economic Forum: Human Capital Report 2015, at <http://reports.weforum.org/human-capital-report-2015/#read>.

continuously upgraded and kept relevant to the demands of a changing labor market.

#### **4.3.2 Lack of Institutions**

The pace of institutional reforms has slowed since 2007, with only marginal improvements in overall governance, and some concerns over reversals in selected areas such as voice and accountability or independent regulators in finance and infrastructure.

Turkey has yet to establish the institutional foundations for the transition to high income. Improvements across the board are needed, including in the business climate, the rule of law, regulatory policies, the guarantee of civil and political rights, public sector accountability, and decentralized decision-making.

Turkey's achievements may be at risk without further steps to strengthen public and private sector governance and deepen institutional reforms. Turkey's reform drive has slowed over the past five years, leaving the country vulnerable to reversals in investor sentiment (The World Bank, 2014).

Turkey needs stronger rules, reliable arms' length regulation and improved mechanism for government accountability to its citizens. This will help to maintain Turkey's attraction for private investors to develop its cities and infrastructure in ways compatible with long-term financial, environmental and social sustainability.

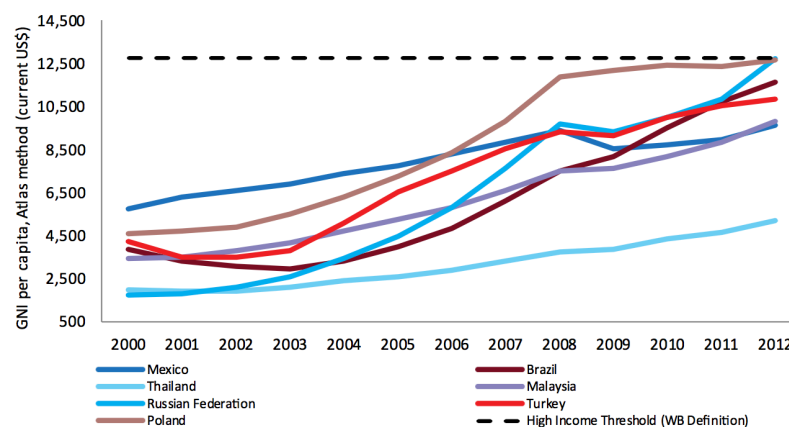
#### **4.4 Climbing toward a High Income Country**

Turkey's reemergence as a global economic player begins with the economic opening in the early 1980s. Since then, Turkey's economy has been transformed in many ways. Whatever Turkey has done so far has worked, in general, however, each source of growth has its boundaries and Turkey reached them.

Now, in order not to remain stuck in the “middle income trap”, this country needs to make a jump over the threshold to become a high-income country. There are three main challenges to face to move forward to high income (The World Bank, 2014): first, Turkey will need to find a way to sustain productivity growth once the positive contribution of the shift of labor out of agriculture slows down. This involves boosting innovation, attracting more FDI and deepen financial markets; second, Turkey’s demographic transition will deliver greater prosperity only if it continues to create jobs at a pace sufficient to accommodate the rising inflows of women and youth into the labor market. Policies to do so encompass making labor markets more flexible, investing in upgrading the skills of the workforce and measures to support women and men as they seek to combine work and family life; finally, Turkey needs to deepen institutional reforms to firmly establish the rule of law and arms’ length regulation of the market. The reform momentum slowed in the wake of the global economic and financial crisis. Sustained progress towards high income will require closing the gap in the quality of economic institutions.

The transition to high income is difficult; as Figure 28 shows, during the 2000s, Brazil, Malaysia, Mexico, Poland, Russian Federation and Turkey all converged rapidly towards this threshold.

*Figure 28: Turkey’s convergence to high income has slowed since 2007*



Source: World Development Indicators (WDI), TurkStat

But after 2008, the process of convergence slowed and, among these peers only Poland and Russian Federation made it across to high income.

Eventually, Turkey as well will cross the threshold to high income, but the rate of progress may be not fast enough to significantly close the gap to the advanced countries.

#### **4.5 Getting to the Point**

Today, more than ever, the growth of a country is strongly linked to the ability of business internationalization. In light of this evidence, what now can directly support the internationalization lies in a growing feature of the current wave of economic globalization: Global Value Chains.

The emergence of global value chains (GVCs) is the defining feature of twenty-first-century trade and has fundamentally altered trade relations between economies. Instead of individual countries producing an item domestically and exporting it abroad, products are now in parts across a wide array of economies that contribute to a product's creation by adding value throughout the production process.

This has two implications for trade policy. First, nontariff trade barriers have become more important than ever to ensuring efficient value chains. Rather than bargaining primarily for market access for their exports in goods and services, economies must ensure the smooth flow of investment, technology, and inputs across and behind borders. Any barrier to trade becomes a self-imposed "tax" on an economy's exports since it increases the costs of doing trade with a given economy (Nadeau, 2014).

Second, the emphasis on adding value means that economies no longer need to focus on large-scale manufacturing or "national champion" industries but can deepen economic participation by emphasizing the addition of value across the production chain.

Global value chains (GVCs) have become a dominant feature of the world economy, involving countries at all levels of development, from the poorest to the most advanced. This brought competitive pressure on governments to adopt reforms that would help their producers to find niches in which they will try to make the most of their capabilities.

For the reasons mentioned above, Global Value Chains could be the key for Turkey to move forward.

Turkey's presence in GVCs is rather robust, yet this presence is concentrated in the lower segments of production chain. One of the main reasons lying behind this problem is that SMEs in Turkey could not effectively participate and upgrade in the production chains due to their structural constraints. Therefore, Turkey should aim at implementing concrete actions in terms of improving SMEs' R&D capacity and human capital structure while focusing on capital and technology intensive sectors and supporting clustering activities for them. These policy actions would help SMEs to transform their production schemes and take part in the higher value added segments of the production chain by improving quality and technological sophistication of products. Increasing productivity and technological upgrading in its export performance would allow Turkey to become more competitive in its exports markets.

Without any doubt, for firms to upgrade in the Global Value Chains, technology dissemination and skills upgrading is important. In order to improve R&D capacity and human capital structure of the SME's supporting their clustering activities, certain actions are worked out as well (Republic of Turkey, 2014).

This will give Turkey not only incentives to quality and productivity but also access to a global demand characterized by high potential to growth.



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