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*Employment implications of trade and changes in skills demand:
Evidence from selected countries*

Hajnalka Tarjáni

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Preface

The primary goal of the ILO is to work with member States towards achieving full and productive employment and decent work for all. This goal is elaborated in the ILO Declaration 2008 on *Social Justice for a Fair Globalization*, which has been widely adopted by the international community. Comprehensive and integrated perspectives to achieve this goal are embedded in the Employment Policy Convention of 1964 (No. 122), the *Global Employment Agenda* (2003) and – in response to the 2008 global economic crisis – the *Global Jobs Pact* (2009) and the conclusions of the Recurrent Discussion Reports on Employment (2010 and 2014).

The Employment Policy Department (EMPLOYMENT) is engaged in global advocacy and in supporting member States in placing more and better jobs at the center of economic and social policies and growth and development strategies. Policy research and knowledge generation and dissemination are essential components of the Employment Policy Department's activities. The resulting publications include books, country policy reviews, policy and research briefs, and working papers.

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Azita Berar Awad
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Foreword

Trade, globalization and technology create opportunities for economic development, raising output and incomes, and for diversification of economic sectors with growth potential for productive and decent employment. They also create challenges to dynamically adjust to shifting requirements in human capital investment in order to keep abreast of change and to remain competitive in regional and international markets. Hence the role of skills development is instrumental for translating trade openness into sustainable growth.

In this era of accelerating change in the world of work, it is critically important to strengthen systems so that the labour market can provide the required skills and qualifications, as well as create an enabling environment that can foster adaptation and adjustment to fast changing market demand, for both workers and employers. Governments and social partners have a key role to play in this context through their active collaboration in linking education and training systems to industry and matching skills supply to demand.

The ILO's Skills for Trade and Economic Diversification (STED) programme provides a framework to build partnerships between ministries (labour, trade and other related ministries) and their agencies, education and training institutions, employers' organizations, trade unions, as well as other sectoral stakeholders, to bring their individual perspectives and information together to integrate skills development into sectoral development policies and to anticipate and prepare for future skills needs. The STED programme is designed to support growth and decent employment creation in sectors that have the potential to increase exports and contribute to economic diversification. The programme works with national and sectoral stakeholders in tradable sectors in order to better understand the strategic development challenges facing each target sector, and to better identify the skills development policies that can address those challenges. Thus, the STED programme supports the formation of skills for which there is labour market demand and additionally helps to avoid skills mismatches.

To support the application and implementation of the STED programme at country level, a number of country background papers were prepared to provide information on issues related to structural transformation at the national level, to look at the impact of trade on employment shifts within and across sectors and economic activities, and to identify the resulting implications on skills demand and skills mismatch.

This paper provides a synthesis report of the country papers and aims to provide analysis on the implications of international trade on employment and skills demand in selected countries, including Cambodia, Ghana, Jordan, Malawi, Morocco, Myanmar, the Philippines, Tunisia and Viet Nam. These countries are at different stages of opening up to trade and integration into the global economy, and pursue different strategies to realize growth through trade. The paper looks at trends in exports between 2000–2015, and discusses the direct and indirect effects of exports on production and employment in interconnected sectors of the domestic economy. Subject to the limited availability of labour market data from most of these countries, the paper seeks to identify corresponding changes needed in employment structures, strategies and institutions, and summarizes information on existing skills imbalances. This paper is authored by Hajnalka Tarjáni, an external collaborator.

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Abstract

This paper provides analysis on the implications of international trade on employment and skills demand in selected countries, including Cambodia, Ghana, Jordan, Malawi, Morocco, Myanmar, the Philippines, Tunisia and Viet Nam. It is based on a number of background studies which were prepared to support the implementation of the ILO's Skills for Trade and Export Diversification Programme in these countries. These countries are at different stages of opening up to trade and integration to the global economy, and pursue different strategies to realise growth through trade. The paper looks at trends in exports between 2000–2015, and discusses the direct and indirect effects of exports on production and employment in interconnected sectors of the domestic economy. Subject to the limited availability of labour market data from most of these countries, the paper seeks corresponding changes in the structure of employment, and summarises information on existing skills imbalances.

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Introduction

This paper presents a synthesis of a number of country reports, which were prepared between March 2015 and July 2017 to provide background information and support to the implementation of the Skills for Trade and Economic Diversification Programme. The country reports cover Cambodia, Ghana, Jordan, Malawi, Morocco, Myanmar, the Philippines, Tunisia and Viet Nam, and provide high-level, macro-focused analysis on the implications of trade on employment. This covers shifts within and across major sectors and economic activities, and the implications on skills demand and skills mismatch in the relevant countries. Subject to the limitations of data availability, the analysis considers changes in the occupational composition or the level of educational attainment of the workforce in key trading sectors, and identifies current labour market trends.

The aims of this working paper are to provide a comprehensive summary of the country background papers, and to identify common trends, themes and skills development pathways across the selected countries. The first section provides a brief historical context to the development of trade policy in each country. This is followed by an assessment of the trade performance of each country during the past two decades, including changes in the value of imports and exports, key export items and industries, and the diversification of products and markets. The third section examines the effects of trade on domestic sectors and the labour market through utilizing two analytical databases from the World Bank's Integrated Trade Solution (2017). The World Bank Export of Value Added Database¹ provides information on how the evolution of trade in certain sectors has contributed to the development of the domestic economy, through the analysis of domestic value added in key exporting sectors and their linkages with other sectors of the economy. Data on the contribution of labour to exports from the Labour Content of Exports Database (LACEX)² is used for the analysis of key employment generating sectors, including the relative importance of skilled and unskilled labour. Section five discusses labour force characteristics and key employment indicators, and identifies employment shifts between the primary economic sectors, and where data is available, between sub-sectors, occupations, and the level of educational attainment. Section six summarizes the information available on current and anticipated skills demand, including government agendas on priority export sectors and skills development. Various aspects of skills mismatch are also discussed. Section seven concludes the report.

The countries examined are located in different geographic and economic regions: Cambodia, Myanmar, the Philippines and Viet Nam are part of the Association of South East Asian Nations (ASEAN); Jordan, Morocco and Tunisia are part of the developing Middle East and North Africa (MENA) region, while Ghana and Malawi are parts of the Western and sub-Saharan Africa regions. As these countries have different economic and social structures, and are at different levels of development, the analysis does not use direct comparisons.

¹ The World Bank's Export of Value Added Database is available at <https://wits.worldbank.org/analyticaldata/analyticaldata.aspx>.

² More information on the LACEX database is available at: <https://wits.worldbank.org/analyticaldata/analyticaldata.aspx>.

1. Country context

Long-term political and social stability and a regime which is supportive of openness and integration to the global economy are essential for the development of sound international trade relations, and for attracting foreign direct investment (FDI). Therefore, the trade performance of these countries needs to be assessed and analyzed in the context of their historical, political and social development. All of these countries have gained independence in the past century, and many of them have struggled with political instability, social unrest, or the effects of conflict in their regions. Despite the progress that has been achieved during the past decades, many of these countries are at a low level of economic and social development, including the prevalence of widespread poverty and weak conditions for human development (table 1).

Table 1: Selected development indicators

Country	GDP per capita ¹ in 2015	Stage of development	Rank in the WEF <i>Global Competitiveness Report</i> ²	Rank in the World Bank's <i>Doing Business Survey</i> ³	UNDP <i>Human Development Index</i> ⁴
Cambodia	US\$1021 low-income	Factor-driven	90	127	143
Ghana	US\$1696 lower middle-income	Factor-driven	119	114	140
Jordan	US\$3976 upper middle-income	Efficiency-driven	64	113	80
Malawi	US\$494 low-income	Factor-driven	135	141	174
Morocco	US\$3238 lower middle-income	Efficiency-driven	72	75	126
Myanmar	US\$1204 lower middle-income	Factor-driven	131	167	148
Philippines	US\$2635 lower middle-income	Transition (from factor- to efficiency-driven)	47	103	115
Tunisia	US\$4235 upper middle-income	Efficiency-driven	92	75	96
Viet Nam	US\$1685 lower middle-income	Transition (from factor to efficiency driven)	56	90	116

1 Measured in constant US\$ for 2010. Source: World Bank, World Development Indicators (WDI) Database.

2 Rank of 144 countries in 2015–2016.

3 Rank of 189 countries in 2015.

4 Rank of 188 countries in 2015.

Source: World Bank, 2016a; World Economic Forum, 2016; UNDP, 2015.

With a population of around 15 million people, Cambodia is one of the least populous countries of the ASEAN region. Nearly three-quarters of its population live in rural areas, and over a quarter live in poverty (Cambodia National Institute of Statistics, 2014). Access to basic infrastructure remains a key issue in large parts of the country. The country has

enjoyed political stability and improved security from the late 1990s, and since that time Cambodia has gradually liberalized and opened up its economy to trade and foreign investment. The country's accession to ASEAN and the ASEAN Free Trade Area in 1999 marked a key development in trade, as it enabled importing and exporting within the region at lower duties and tariffs. Another key development was the country's accession to the World Trade Organization (WTO) in 2004, which opened up trade opportunities to the rest of the world. Cambodia has become one of the fastest growing economies of South-East Asia, with annual GDP growth between 2006–2016 averaging around 6 per cent (World Bank, 2016a). Exporting sectors have been responsible for the majority of direct formal employment and for generating employment growth (World Trade Organization, 2011).

Myanmar is one of the lowest income countries in the ASEAN region. It had a population of 51.4 million people in 2014, around one-third of which lives in poverty (Myanmar Government, 2011). From the 1960s, Myanmar was governed by military-led governments and had a centrally planned economy. From the late 1980s, the country embarked on a gradual shift from central planning to a market economy. However, economic transition only gained momentum after 2011. The United States, the European Union and other developed nations imposed various political and economic sanctions to discourage trade, investment and aid for Myanmar from the 1990s. Since the end of military rule in 2011, these sanctions have been gradually eased. The country has embarked on opening up its economy, and implementing political and economic reforms. International investment and trade is expected to pick up significantly due to these reforms, including Myanmar's updated foreign investment law and closer integration with the ASEAN community. Economic growth is currently primarily based on population growth and natural gas exports (McKinsey Global Institute, 2013; World Bank, 2014a). Due to poor domestic labour market conditions, around 10 per cent of Myanmar's labour force is working in the ASEAN region as migrant workers (Myanmar Government, 2011).

Since gaining independence in 1946, the Philippines has been one of the most dynamically growing economies of the ASEAN region. It had a population of over 92 million people in 2010, and over 100 million in 2015, making it one of the most populated countries in South-East Asia. Population has been growing at a rate of over 2.1 per cent over the past two decades, and it is projected to reach over 142 million by 2045, two-thirds of whom would be in the working age group (Philippine Statistics Authority, 2014). Despite significant economic growth over the past decades, the performance of the Philippine economy has been mixed and uneven. This is partly due to climate events and natural disasters. Poverty remained widespread, with around one in four Filipinos living in poverty in 2010. Employment growth in this period followed a boom and bust pattern, and the creation of productive employment opportunities has been slow (Asian Development Bank, 2007). Tackling unemployment and providing decent employment opportunities for the growing youth population is a key challenge for the Government.

With a population of over 90 million people, Viet Nam is the thirteenth most populous country in the world (World Economic Forum, 2015). Due to broad-based economic reforms during the past 30 years, the country has experienced rapid economic development and has recently become a lower middle-income country. The reforms started in the mid-1980s and have progressively increased the country's integration into international markets through trade and FDI, introduced more market elements in the centrally planned economy, and accelerated structural change for the industrialization and modernization of the economy. With the structural transition, employment is shifting from low productivity agriculture to the more productive industrial sector, and economic growth has picked up significantly. This has been accompanied by improving social indicators, and poverty decreasing to below 10 per cent of the population by 2010.

Jordan is an upper middle-income country, and one of the most advanced economies of the developing MENA region. It has a population of around 9.5 million people.

International migrants made up around 41 per cent of the population in 2015 (World Bank, 2016b). The country's current borders were formed in 1988, with the administrative separation of the West Bank area. The Government launched a progressive reform programme from the mid-1990s to promote integration with the global market, and open up international trade and investment. This included the privatization of certain community services, and reforms to key sectors such as finance, information, communications and technology (ICT), pharmaceuticals, tourism, and services. As a result, Jordan's economy grew dynamically during the past two decades, particularly after 2004. Due to the global financial crisis and the turmoil in the region, economic growth dropped back to around 2 per cent between 2009–2013 (*ibid.*). The continuing regional unrest and the worsening security situation in the Syrian Arab Republic and Iraq pose substantial risks to Jordan's growth and development prospects.

Morocco had a population of nearly 34 million people in 2014 (Morocco, 2015). After gaining independence in 1956, Morocco pursued a protectionist trade policy to support self-sufficiency in agriculture, and import substitution in industrial production. From the early 1990s, the Government introduced reforms to accelerate the structural transformation of the economy, and open up to international trade and FDI. Reforms were introduced in all key areas of the economy, including the liberalization of trade and prices, and the privatization of public corporations. This resulted in dynamic economic growth and improvements in the main social indicators, including poverty, which fell to 6.2 per cent in 2011 (UNDP, 2015). Political and economic liberalization, and improving living conditions resulted in fairly stable political and economic conditions. Exporting companies, and foreign-owned companies have been responsible for generating a large share of formal employment, as well as job creation.

Tunisia became an independent state in 1956, and since that time its economy has undergone significant structural transformation. With a population of around 11.3 million people in 2015 (World Bank, 2016a), Tunisia is one of the most developed economies in the MENA region. From the 1970s, the Government embarked on a programme to liberalize the economy and open it up to international trade and investment. Since then, economic and social conditions have improved significantly. Production shifted from agriculture and mining towards services and manufacturing. The Government has also promoted investment in human capital and as a result, access to primary education and health care improved significantly. However, the uprising and the Arab Spring in 2011, and terrorist attacks in 2015, had a severe impact on Tunisia's tourism industry, and undermined the attractiveness of the country as a supplier to international markets. Lack of political stability and security concerns, coupled with slow economic activity and low demand from Tunisia's main trading partner, the European Union (EU), have resulted in weak economic performance. In the past five years, average annual GDP growth has been around 2 per cent, below the overall growth rate of the MENA region (*ibid.*).

Ghana is one of the most advanced economies of the Economic Community of Western Africa, and it is one of two countries in the region that has reached medium-level human development (UNDP, 2015). Ghana became one of Africa's fastest growing economies over the past two decades. It has a population of 26.4 million people (Ghana Statistical Office, 2015). The economy includes a large traditional sector, which primarily consists of agriculture and informal activities, and a relatively small, labour-intensive industrial and service sector (Ghana High Commission UK, 2016). The country has pursued different development paths since gaining independence in 1957. Until the mid-1980s it followed a protectionist, inward-focused industrialization strategy. The focus then shifted to opening up the economy to international trade and investment, and to economic liberalization. A new industrial development strategy led by the private sector was introduced from 2001, supporting the value-added processing of Ghana's natural resource endowments (Ackah, Adjasi and Turkson, 2014). The discovery of oil and gas in recent years induced a shift in production and industrial policy to mining and quarrying away from manufacturing.

Economic growth has been accompanied by a significant reduction in poverty, and by improvements in social conditions. Poverty decreased to 21.4 per cent in 2012, one of the lowest poverty rates in the region (World Bank, 2014b).

Malawi is one of the least developed and smallest countries of sub-Saharan Africa, and has a population of around 17 million people. Malawi gained independence in 1964, and the Republic of Malawi was formed in 1966 following the adoption of a new constitution. Since that time, the Government has pursued an outward-oriented trade and development policy. Poverty is widespread in the country, with nearly half of the population living in poverty. Over 80 per cent of the population lives in rural areas mainly as subsistence farmers in smallholder, rain-fed agriculture. Economic development is constrained by a narrow production base, the lack of basic infrastructure and an unfavorable geographical location for trade. Economic growth is primarily based on the exports of tobacco, tea, and sugar; the emerging mining sector; and large aid inflows. Agriculture accounts for around one-third of GDP, and 90 per cent of exports.

2. Opening up to trade

Trade agreements and association with economic and free trade areas have also played a determining role in the evolution of trade in these countries. This facilitated access to markets at more favourable conditions (lower or no tariffs, or with less administrative burden) and in many cases, trade agreements had a major influence on establishing a domestic industry and production base, or on the modernization and development of existing industries. Some clear examples linked to specific agreements include the rise of the garment industry in Viet Nam, bicycle manufacturing in Cambodia, and aeronautics component manufacturing in Tunisia.

Establishing exports to more demanding markets that have high quality requirements, can also support the development of other domestic industries through spillover effects, and provide a basis for further diversification and a move up the value chain. To utilize this momentum for the modernization of the economy and to facilitate growth through trade, the governments of these countries have supported integration to regional markets and to the world economy and signed a range of key international trade agreements (table 2).

Table 2: Key trade agreements and associations by country

Country	
Cambodia	• ASEAN (1999) • EU Everything But Arms Program (2001) • WTO (2004) • Bilateral Trade and Investment Framework Agreement with the United States (2006) • Subregional arrangements include the Greater Mekong Subregion Economic Cooperation, Cambodia-Lao PDR-Myanmar-Viet Nam Cooperation, Ayeyawady-Chao Phraya-Mekong Economic Cooperation, and the Cambodia-Lao PDR-Viet Nam Development Triangle Area
Ghana	• Economic Community of West African States (ECOWAS) (1975) • WTO (1995) • African Growth and Opportunity Act with the United States (2000) • Bilateral Stepping Stone Economic Partnership Agreement with the EU (2007)
Jordan	• EU Association Agreement - FTA (1997), further liberalization of agricultural products (2007) • Greater Arab Free Trade Area (GAFTA) (1998) • WTO (2000) • FTA with the United States in (2001), followed by a Qualifying Industrial Zones (QIZ) Agreement • Arab-Mediterranean Free Trade Agreement (Agadir Agreement) (2007) • Since 2011, negotiations for a Deep and Comprehensive Free Trade Agreement (DCFTA) are underway with the EU • Relaxation of EU Rules of Origin over ten years, applied to products manufactured in 18 special development zones in Jordan, and requiring a contribution from Syrian refugee labour. This initiative is part of the EU's response to the Syria crisis, and it is expected to boost Jordanian access to the EU market and create job opportunities (2016)
Malawi	• WTO (1995) • Common Market for Eastern and Southern Africa (COMESA) (2000) • African Growth and Opportunity Act (AGOA) with the United States (2000) • Everything but Arms (EBA) with the EU (2001) • Southern African Development Cooperation (SADC) (2004)
Morocco	• WTO (1995) • Bilateral agreements with EFTA countries (1997)

	• GAFTA (1998) • FTA with the United States in (2004) • EU Association Agreement - FTA (2000), and agreement on the trade of agricultural, processed agricultural and fishery products (2012) • Arab-Mediterranean Free Trade Agreement (Agadir Agreement) (2007) • Since 2011, negotiations for a DCFTA are underway with the EU
Myanmar	• Greater-Mekong Subregion Economic Cooperation Program (1992) • ASEAN (1997) • Suspension of US sanctions on investment (2012) • Reinstatement of EU GSP trade preferences (2013)
Philippines	• WTO (1995) • ASEAN (1999) • ASEAN FTAs with Australia, China, India, Korea and New Zealand, Comprehensive Economic Partnership Agreement with Japan) • Philippines-Japan Economic Partnership Agreement (2008) • Trans-Pacific Partnership initiative (2010)
Tunisia	• WTO (1995) • GAFTA (1998) • FTA with the United States in (2002), followed by a bilateral investment treaty • EFTA (2004) • EU Association Agreement - FTA (1995), Agadir Agreement (2007) • Since 2011, negotiations for a DCFTA are underway with the EU
Viet Nam	• Greater Mekong Subregion Program (1992) • ASEAN (1995) • United States: Lifting of the 20-year trade embargo (1994), followed by a bilateral trade agreement, a trade and investment framework agreement and textile, air transport, and maritime agreements; Permanent Normal Trade Relations status (2007) • WTO (2007) • Trans-Pacific Partnership initiative (2010) • Generalized Scheme of Preferences, and a Partnership and Cooperation Agreement with the EU (2012)

To facilitate the inflow of FDI and the establishment of foreign-owned companies, the trade agreements have been complemented by relevant regulation, liberalization and often the promotion of FDI. In many cases, domestic production has been established through fully or partially foreign-owned companies. To utilize the relatively cheaper labour, which was abundant in these countries (and continues to be in most, despite rising labour costs), many multinational companies have outsourced labour-intensive parts of their production. In this case, trade includes the processing and re-exporting of imported materials and intermediate products in the supply chain of multinational companies. Some countries, like the Philippines and Morocco, where suitable skilled labour is available, have been successful in developing more skill-intensive parts of business process outsourcing (BPO) and information technology outsourcing services exports. Most of the examined countries have established special economic zones (free zones, qualifying industrial zones, etc.) where preferential regulations govern the operations of foreign-owned companies, and the infrastructure, resource and logistics needs of companies can be more effectively serviced.

3. Trends in international trade

3.1. Trade performance

The trade performance of these countries has improved substantially during the past two decades, and the importance of trade has increased in their economies. Among other factors, these improvements reflect efforts and reforms to support opening the economies to trade liberalization. However, besides Viet Nam and the Philippines, the value of trade is still relatively low. Merchandise trade indices, measured as the sum of goods exports and imports relative to the size of the economy (GDP), show a mixed picture (table 3). Although this indicator inherently reflects differences in the level of economic development and productivity, the correlation between merchandise trade openness and economic growth tends to be strong in developing economies. While merchandise trade is a key driver of economic growth in Cambodia and Viet Nam, its importance is more limited in Malawi. On the other hand, in more developed economies where skilled labour is more readily available, like the Philippines and to some extent the MENA countries, service industries including BPO and tourism made a significant contribution to growth. While these countries have medium-range values of openness to merchandise trade, this does not capture the importance of trade in services.

Table 3: Selected trade performance indicators

Country	Value of exports in 2016* (US\$ billion)	Openness to merchandise trade**	Merchandise exports 10yr growth rate (compound annual average) 2007–2016	Services exports 10yr growth rate (compound annual average) 2007–2016	Trade balance for goods/ services in 2016
Viet Nam	214.6***	195%****	17.0%	10.1%	143
Philippines	76.3	51%	-0.3%	9.8%	140
Morocco	25.4	66%	4.2%	1.0%	80
Cambodia	16.9	126%	15.4%	10.5%	174
Tunisia	13.8	74%	-1.1%	-4.6	126
Myanmar	11.5	51%	9.9%	31%	148
Ghana	10.0	63%	12.8%	14.3%	115
Jordan	7.5	74%	3.3%	6.1%	96
Malawi	0.9	32%	-0.5%	2.7%	116

* Using mirror data, rounded.

** Measured as the total of imports and exports of goods as a share of GDP in 2016.

*** In 2015.

**** In 2014.

Source: International Trade Center (ITC) Trade Map Database, mirror data (2016a).

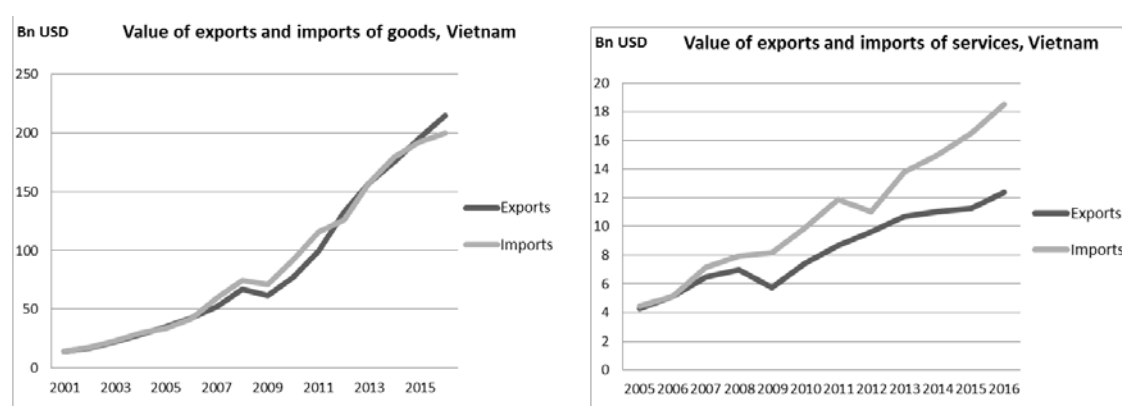
The following sections provide insight into the development paths of goods and services trade in these countries over the past 15 years (figures 1-9).³ The data clearly reflects the effects of the global financial crisis from 2008–2011 and the sluggish global recovery from its aftermath.

³ Data for 2015 and 2016 are ITC estimates. Data on services trade is available from 2005 onwards.

Countries like Viet Nam and Cambodia have made clear progress in implementing outward-oriented trade policy. Their trade is dominated by merchandise trade, which has grown significantly over the past decade, being supported by trade growth in services.

NEPs are also crucial vehicles for deepening democracy since they should be conducted in a tripartite manner with the active participation of representatives of workers and employers in dialogue with the government. Effective tripartism and NEPs together can develop common employment goals and priorities. Involving other groups and ministries, such as gender or women's ministries, as well as women's organizations, can further embed gender sensitivity into policies (see box 3.1). NEPs offer an opportunity to make an explicit commitment to women's empowerment. They can help address the various intersections with other inequalities that shape women's knowledge, chances and capabilities in the labour market.

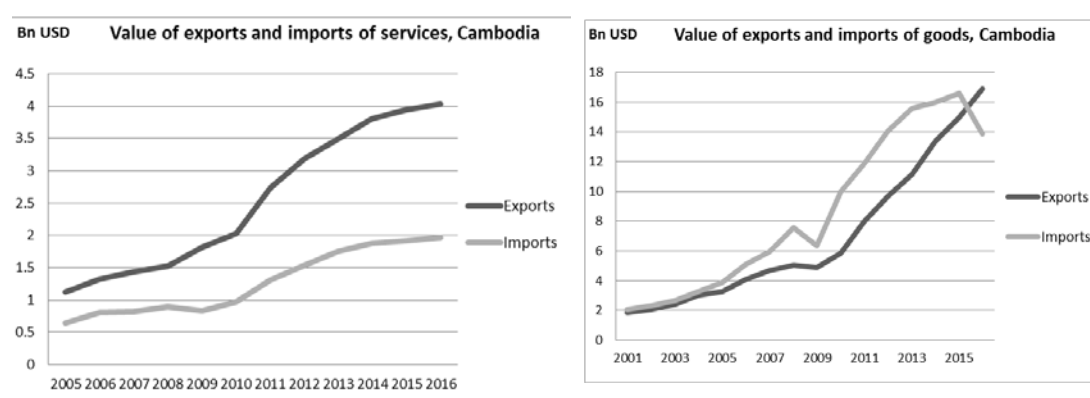
Figure 1: Trends in goods and services trade, Viet Nam



Source: ITC Trade Map Database, mirror data (2016a).

Since the start of the reform era, trade has expanded steadily in Viet Nam. The value of Viet Nam's merchandise exports grew from just US\$14.6 billion in 2001 to US\$214.6 billion in 2016. Growth in service exports has been more sluggish, increasing from US\$4.3 billion in 2005 to US\$12.4 billion in 2016.

Figure 2: Trends in goods and services trade, Cambodia

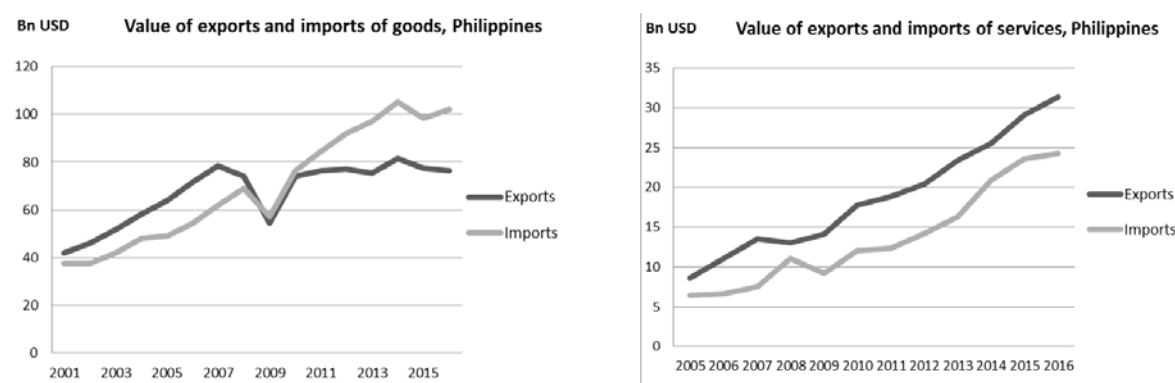


Source: ITC Trade Map Database mirror data, 2016a.

Cambodia's value of merchandise exports increased from around US\$1.8 billion in 2001 to over US\$16.9 billion in 2016. During the same period, the value of merchandise

imports increased from a similarly low value of US\$2.1 billion to US\$13.9 billion. Growth in both merchandise exports and imports accelerated after the global financial crisis. This resulted in a positive trade balance for the first time in the past 15 years. While merchandise trade is significant for the Philippines, export growth lost momentum in 2007, and remained broadly flat since the global financial crisis. Merchandise import growth resumed in 2009, resulting in a negative global merchandise trade balance. The export of services expanded more rapidly during the past decades and become a key driver of growth.

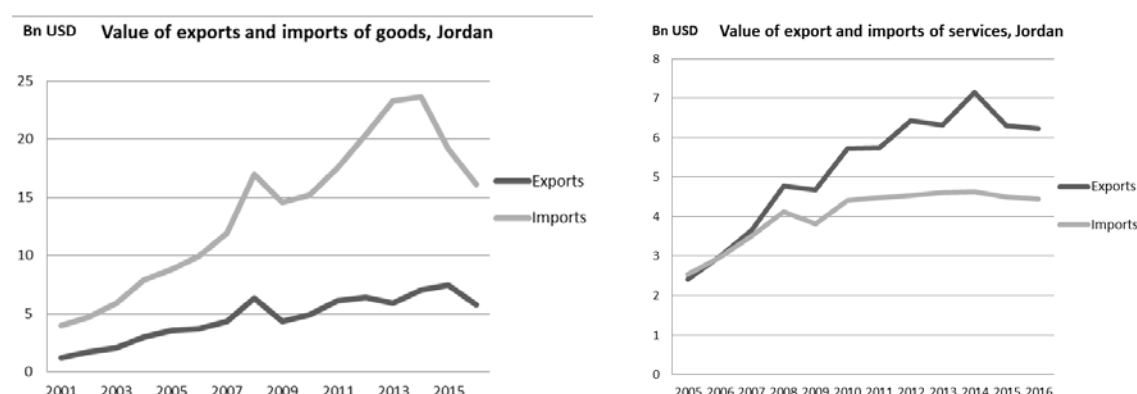
Figure 3: Trends in goods and services trade, Philippines



Source: ITC Trade Map Database mirror data, 2016a.

Merchandise trade in the MENA countries grew only modestly or stagnated during the past decade, with significant negative trade balances partly due to the large amounts of imports of raw materials and intermediate inputs for re-exporting. Services trade in the MENA countries generated surplus in the same period, primarily driven by tourism and BPO.

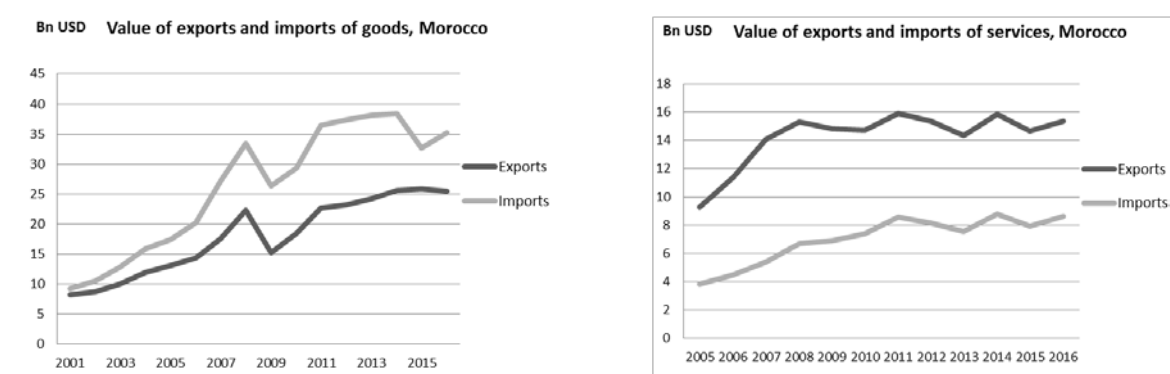
Figure 4: Trends in goods and services trade, Jordan



Source: ITC Trade Map Database mirror data, 2016a.

Jordan experienced moderate growth in the value of merchandise exports between 2001–2016. The merchandise trade balance has been negative and increasing since 2000, and reached US\$-10.4 billion in 2016. Services exports grew more rapidly, at a rate of 6.1 per cent per year over the past decade. Combined with flat service imports, this has resulted in a moderate surplus for services.

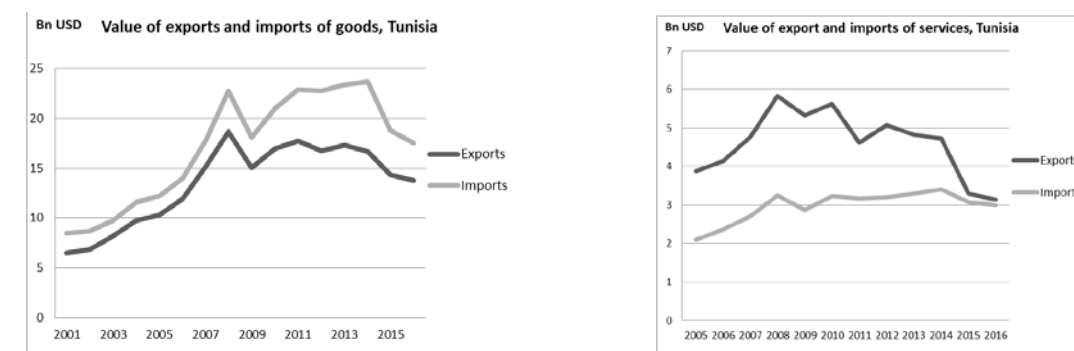
Figure 5: Trends in goods and services trade, Morocco



Source: ITC Trade Map Database mirror data, 2016a.

Since the 1970s, trade has become a key driver of the Moroccan economy which facilitated a shift away from traditional products in agriculture and mining towards manufacturing and services. The value of exports increased dynamically, particularly before the global financial crisis. However, the value of imports expanded through this period, and reached US\$35.2 billion in 2016. This resulted in the gradual opening of the goods trade balance to around US\$-9.8 billion in 2016. Despite flat performance of services exports over the past decade, the services trade balance has been in surplus, which reached US\$6.8 billion in 2016.

Figure 6: Trends in goods and services trade, Tunisia



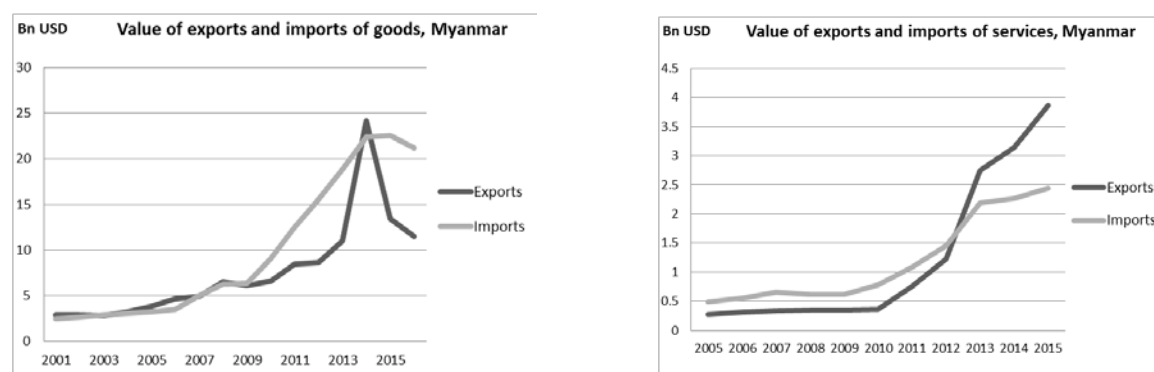
Source: ITC Trade Map Database mirror data, 2016a.

The value of Tunisia's international trade has increased steadily through the past decades due to increased integration with international supply chains, lowering trade barriers and opening up to FDI. The global financial crisis and the sluggish global recovery in its aftermath significantly affected Tunisia's merchandise exports. Since 2008, its value has decreased by 3.7 per cent per year on average – while before the crisis, between 2001–2007, it grew at an annual average rate of 16.2 per cent. The merchandise trade balance has been negative but stable during this period, which primarily reflects a large volume of imports for further assembly and re-exporting. The value of services exports has also declined since 2007, at a rate of -4.6 per cent per year.

The trade performance of Ghana, Myanmar and Malawi has been modest, as these countries are at the early stages of pursuing outward-oriented trade strategies. Myanmar's international trade started to increase following the gradual opening up of the economy, and particularly after lifting of the US sanctions in 2012, and reinstating trade with the EU in 2013. Starting from a value of just US\$2.9 billion in 2001, merchandise exports jumped to US\$24.2 billion in 2014, and returned to around US\$11.5 billion by 2016. Starting from

a very low base, the exports of services started to pick up after 2010, and their value increased more than ten-fold between 2010–2015.

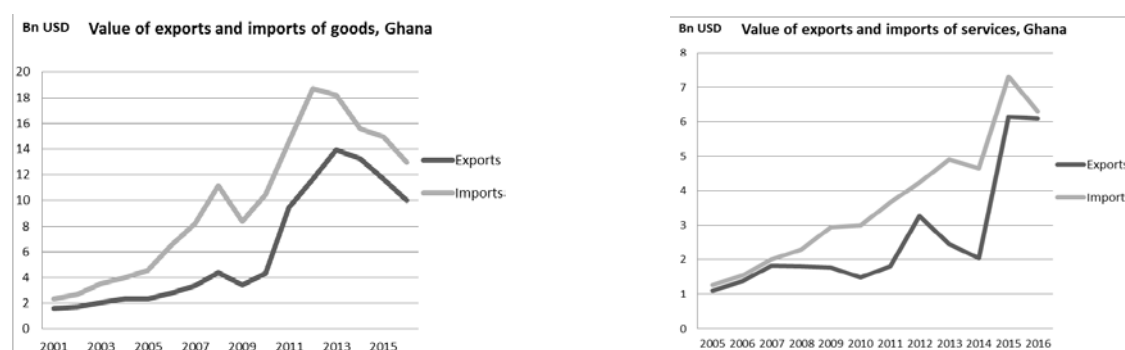
Figure 7: Trends in goods and services trade, Myanmar



Source: ITC Trade Map Database mirror data, 2016a.

Myanmar's international trade started to increase following the gradual opening up of the economy, and particularly after lifting of the US sanctions in 2012, and reinstating trade with the EU in 2013. Starting from a value of just US\$2.9 billion in 2001, merchandise exports jumped to US\$24.2 billion in 2014, and returned to around US\$11.5 billion by 2016. Starting from a very low base, the exports of services started to pick up after 2010, and their value increased more than ten-fold between 2010–2015.

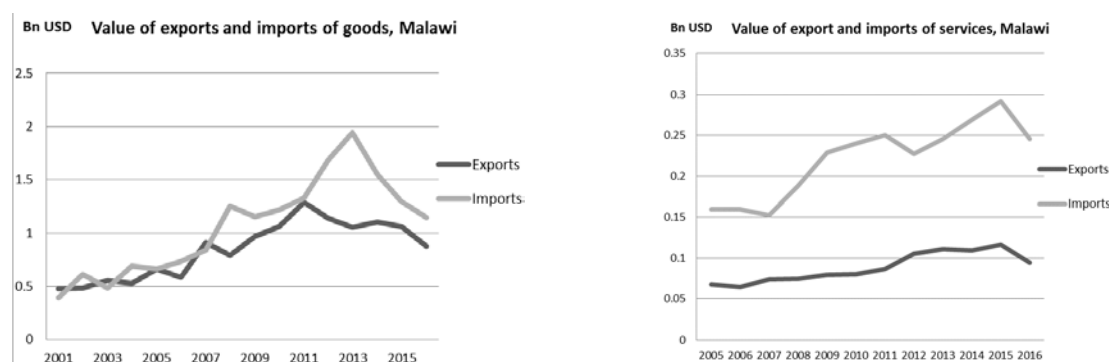
Figure 8: Trends in goods and services trade, Ghana



Source: ITC Trade Map Database mirror data, 2016a.

Starting from a low base, Ghana's trade expanded dynamically during the past two decades. The value of merchandise exports increased rapidly after 2010 due to the commencement of oil exports, increasing production of traditional items, and strong world prices for Ghana's commodity exports (World Bank, 2014a). The value of exports grew to US\$12.8 billion in 2016, to nearly three times its value in 2007. Imports increased by 5.2 per cent per year, to US\$13.0 billion in the same period. This resulted in a moderate negative trade balance, primarily with countries from the sub-Saharan Africa region.

Figure 9: Trends in goods and services trade, Malawi



Source: ITC Trade Map Database mirror data, 2016a.

Malawi's involvement in international trade is relatively modest. The value of its merchandise exports increased from US\$0.5 billion in 2001 to US\$1.3 billion in 2012, and it has been declining since then. In the same period, the value of its merchandise imports decreased from US\$0.4 billion to US\$1.9 billion in 2013. Both exports and imports of services have stayed at low levels and produced slow growth.

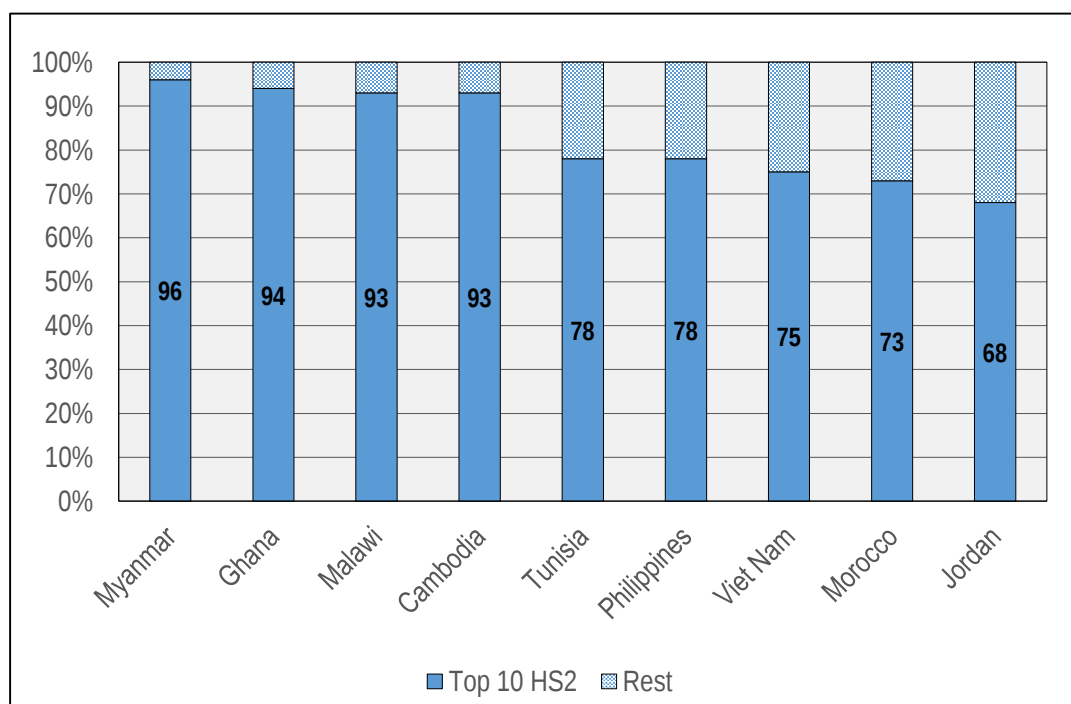
3.2. Key export products and sectors

Besides the overall increase in the value of traded goods, the range and type of traded goods, destination and source markets also provide information on the trade performance of a country. Increasing diversification of exports and the introduction of new export products can reflect strengthening of the domestic production base, and increasing competitiveness of domestically produced products. The level of processing of exported goods reflects the extent of value added by the domestic industry, while the labour and skill intensity of exports reflect the employment and skills demand generated by trade.

Figure 10 shows the share of the ten largest export product categories (at HS 2-digit level)⁴ out of total merchandise exports for each country. In countries like Myanmar, Ghana, Malawi and Cambodia the export share of the ten largest categories is very high, which reflects that exports are based around a few key product categories. In countries like Jordan and Morocco, the range of exports is more diversified, e.g. around one-third to one-fourth of merchandise exports come from other product categories, outside the country's top ten. At the same time, there are important differences in the degree of processing and value added in exports. While in Cambodia manufactured goods constitute 94 per cent of the ten largest export groups, manufacturing exports are minimal in Ghana, and Malawi. These countries primarily export raw and unprocessed agricultural goods and minerals, which have limited scope for job creation and skilled employment.

⁴ The Harmonized Commodity Description and Coding System, also known as the Harmonized System (HS) of [tariff nomenclature](#) is an internationally standardized system of names and numbers to classify traded products. The HS is organized logically by economic activity or component material. The HS is organized into 21 sections, which are subdivided into 96 chapters (HS 2 digit). The 96 HS chapters are further subdivided into headings (HS 4 digit) and over 5,100 subheadings (HS 6 digit).

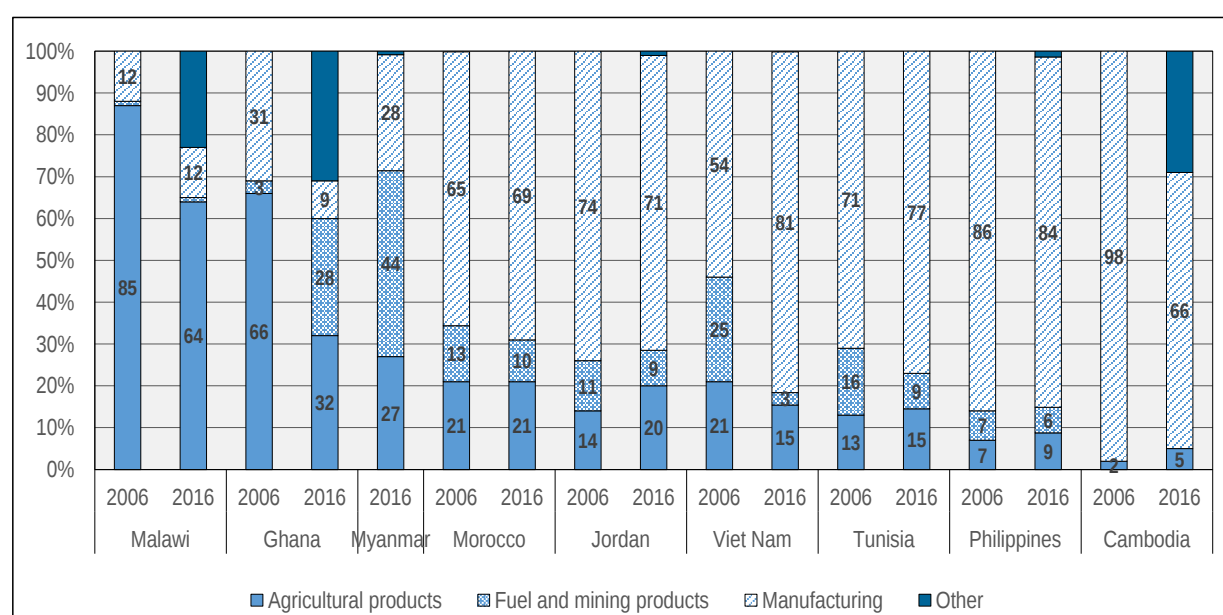
Figure 10: Share of top ten merchandise product groups (HS 2) of total merchandise exports, 2015



Source: ITC Trade Map Database mirror data, 2016a.

Agricultural products dominate merchandise exports in Malawi, where they account for over two-thirds of merchandise exports (figure 11). In Ghana and Myanmar, fuel and mining products dominate the merchandise export structure. In the case of Ghana, gold is included under the “other products” category. Manufacturing products account for the majority of exports in Morocco, Jordan, Viet Nam, Tunisia the Philippines and Cambodia. In Cambodia, nearly all merchandise exports are manufactured products. Viet Nam had the largest share of manufacturing exports between 2006–2016.

Figure 11: Merchandise exports by main product group, 2006 and 2016



Note: Four main product categories were used in 2016, including "Other products" which covers: commodities and transactions not classified elsewhere (including gold); arms and ammunition (SITC section 9 and group 891).

Source: World Trade Organization Trade Statistics Database, Trade Profiles 2007 and 2017.

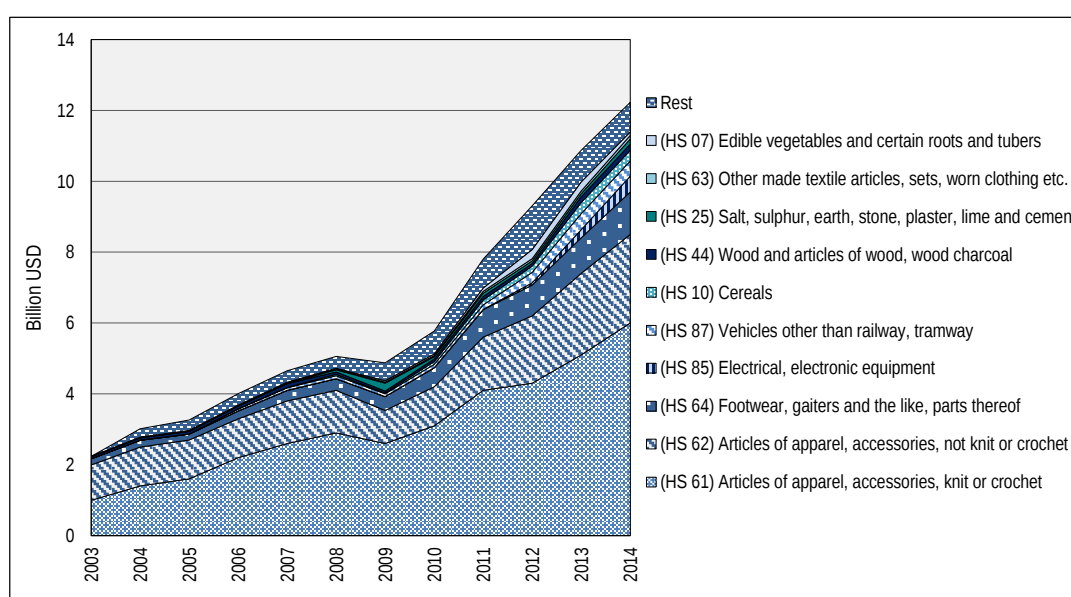
The following section provides more details about the evolution of trade and key exports in the examined countries.

Cambodia

Reforms to open up the economy to trade and foreign direct investment started only about two decades ago in Cambodia. The country is not rich in natural resources and minerals, but it has a large and growing workforce, many of whom are unskilled or have low levels of skills. Trade has developed around this key resource, leading to the development of low skill-intensive manufacturing exports. Foreign investment was initially concentrated in the textile and garment sector, and as a result textiles and garments dominate Cambodia's merchandise exports (figure 12).

The level of export product diversification is relatively low. Various types of textiles and garments have accounted for around 70 per cent to 80 per cent of total merchandise exports between 2003–2014. The value of garment exports has more than tripled during this period. Footwear has been the second largest export product category, accounting for 10 per cent of exports in 2014. The export structure has become more diversified with the more recent introduction of sectors like electrical and electronic equipment and bicycles. Based on experience from other countries, like Viet Nam, these product groups have potential for rapid growth. The exports of electrical and electronic equipment started to pick up in 2012, and by 2014 these products have accounted for 4 per cent of total exports. The exports of vehicles, which primarily covers manufacturing of bicycles, have been gradually increasing since 2006, reaching 3 per cent of total exports in 2014.

Figure 12: Cambodia's top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

The dominance of textiles, garments and apparel is also visible at the level of individual products (HS at 6 digits),⁵ as they represent seven of Cambodia's ten largest export products. In 2014, these included:

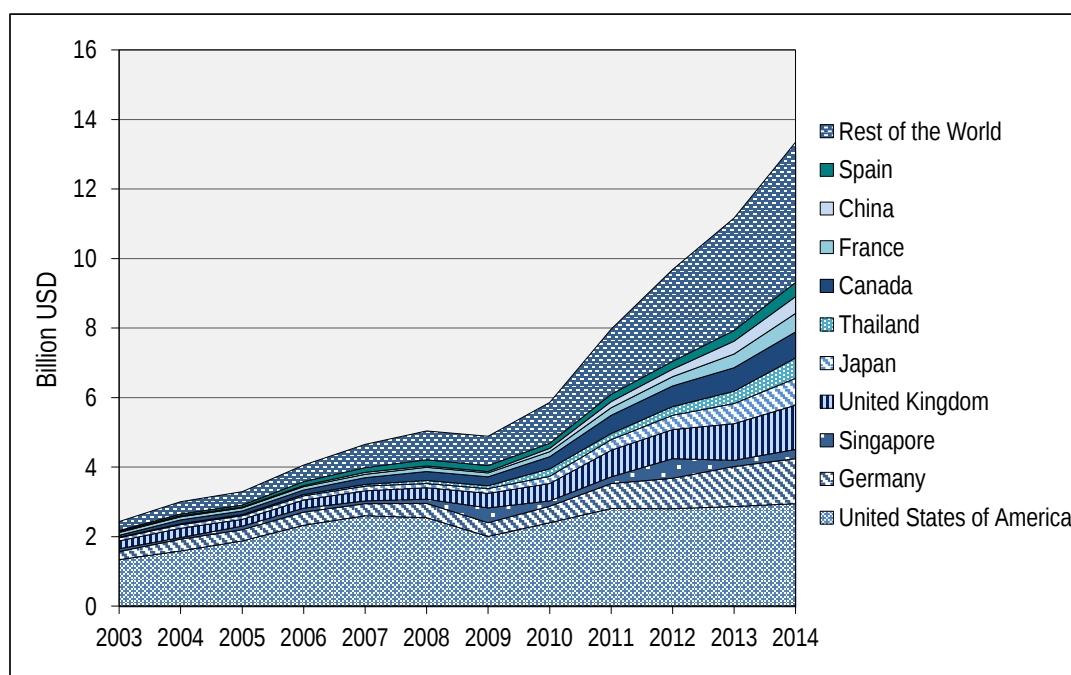
- Jerseys, pullovers, cardigans, waist coats and similar
- Women's or girls' suits, ensembles, jackets, blazers, dresses, skirts
- T-shirts, singlets and other vests, knitted or crocheted
- Women's suits, jackets, dresses, skirts, etc.
- Men's suits, jackets, trousers, shorts, etc.
- Footwear, upper of leather
- Bicycles and other cycles, not motorized
- Women's or girls' slips, petticoats, briefs, panties, knitted or crocheted
- Babies garments, knitted or crocheted
- Footwear – not elsewhere specified (nes), soles/uppers of rubber/plastic

Since the mid-1990s, the United States has been the largest destination market for Cambodia's exports, particularly for garments (figure 13). It is estimated that the top 15 United States buyers account for more than half of garment exports (World Trade Organization, 2011). However, the significance of this market has decreased recently, due to relatively weak growth in the US market versus rapid growth in other markets. Exports to the EU in particular have grown rapidly, by more than US\$500 million between 2010 and 2011 alone. Between 2007 and 2011, the EU's share of Cambodian exports rose from 23 per cent to nearly 30 per cent, mostly due to the rapid increase of garment and bicycle

⁵ Six-digit codes are the most detailed standard article/product definitions used in the Harmonised System. The HS includes over 5,100 subheadings at the six-digit level.

exports. Exports to China, Japan and Korea have also increased rapidly in this period, mostly for garments.

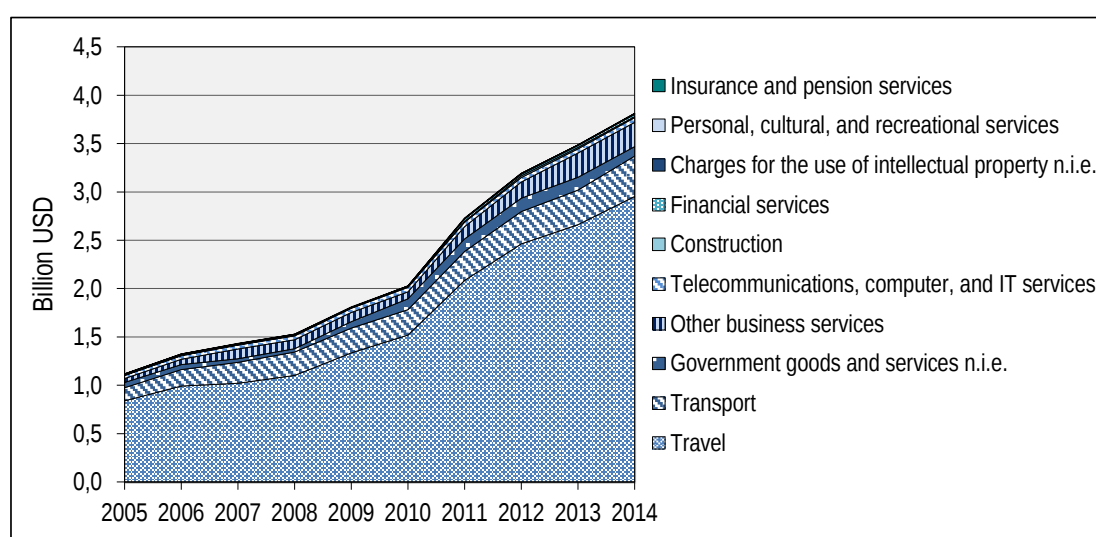
Figure 13: Cambodia's goods export markets



Source: ITC Trade Map Database mirror data, 2016a.

In 2014, imports of various types of fabrics, fibres and cotton accounted for about 40 per cent of Cambodia's goods imports, machinery and transport equipment for nearly 20 per cent and miscellaneous manufactured articles for around 15 per cent. This reflects that Cambodia's main manufacturing sectors, including garments, shoes and bicycles, use imported raw materials and parts for processing and assembling into finished products, and other parts of the value chain are located in other countries. For example, the garment industry uses fabrics and yarn produced abroad, which get processed in Cambodia into garments and then re-exported. The largest sources of goods imports were Thailand (28 per cent), China (20 per cent), and Hong Kong 20 per cent).

Figure 14: Cambodia's service exports



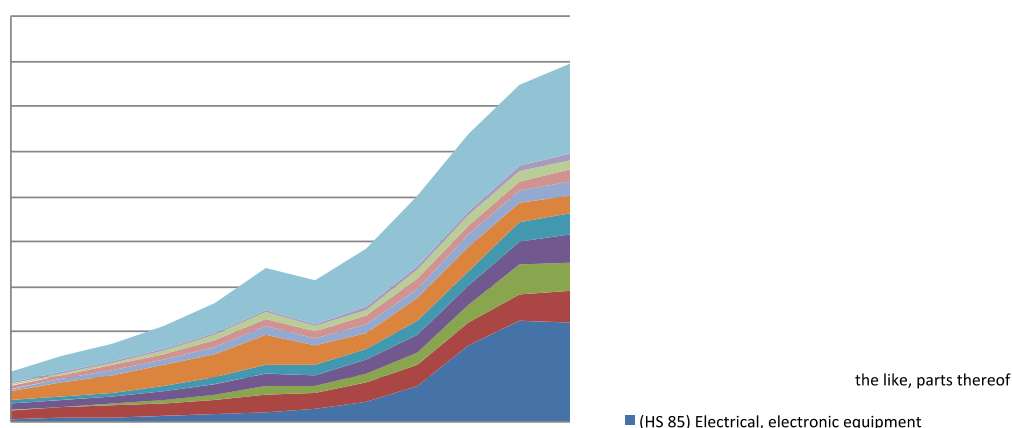
Source: ITC Trade Map Database mirror data, 2016a.

Services exports are largely determined by tourism, which has been growing solidly for over a decade and now accounts for about 13 per cent of GDP (figure 14). Tourism is estimated to have generated about 300,000 jobs, through direct and indirect employment (World Trade Organization, 2011).

Viet Nam

Viet Nam's trade performance has improved rapidly during the past three decades. Reforms to open up the economy and to increase trade and FDI started fairly early, and the country enjoyed social and political stability. With increasing integration into the global economy, the export structure of the country has moved from the traditional exports of agricultural and mining commodities and garments towards higher value-added manufacturing. Although Viet Nam's export structure is still dominated by agricultural and low skill-intensive products, the importance of more advanced manufacturing, information technology and high-tech industries has been growing in the country's exports (figure 15).

Figure 15: Viet Nam's top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

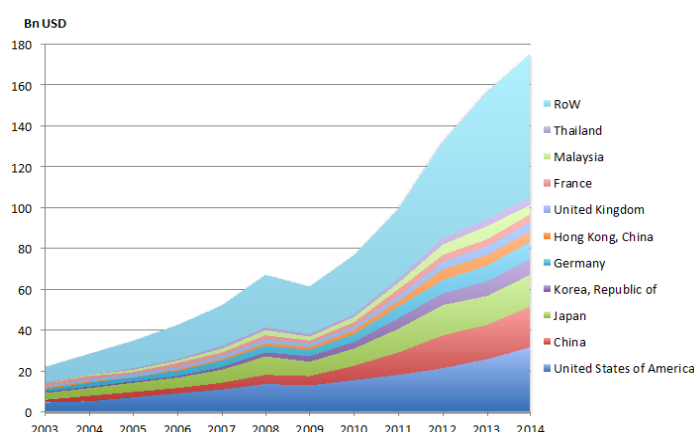
By analysis of the broad groups of products (HS level 2), electric and electrical commodities have become the largest export group by 2014. Their share of total merchandise exports has been rising fast from just 5 per cent in 2003 to 28 per cent in 2014 (exports accelerated from 2011). Although the export share of the apparel industry has declined from 18 per cent to 14 per cent during this period, it remains the second largest category for merchandise exports, followed by footwear. Viet Nam also exports a large amount of raw and unprocessed agricultural products, and is one of the world's biggest exporters of rice, cashew nuts, black pepper, coffee and tea, and seafood. In addition, Viet Nam is also one of the largest oil producers and exporters in the region.

In terms of individual products, Viet Nam's top ten largest export items include:

- Electronic apparatus for line telephony, telegraphy
- Petroleum oils, oils from bituminous minerals
- Rice
- Footwear
- Coffee
- Natural rubber, balata, gutta-percha, etc.
- Other furniture and parts
- Fish fillets, fish meat
- Printing machinery
- Jewellery and parts of precious metal

The destinations of Viet Nam's exports are diversified among a number of countries. The United States (18 per cent), China (11 per cent), and Japan (9 per cent) were the main export markets for goods in 2014 (figure 16).

Figure 16: Viet Nam's goods export markets

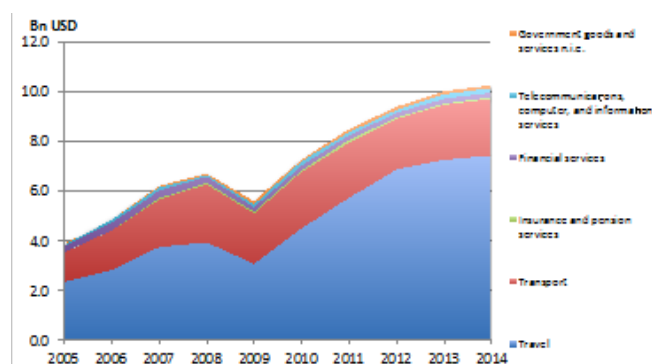


Source: ITC Trade Map Database mirror data, 2016a.

Electrical machinery, mechanical appliances and machinery, and mineral fuels and oils were the largest import product groups in 2014, with petroleum oils being the largest individual commodity. The top three source countries of merchandise imports were China, the Republic of Korea and Japan.

The export of services is less significant in Viet Nam, although the tourism industry has been growing at a fast pace. In 2014, travel and tourism accounted for over two-thirds of the export of services, followed by transportation (figure 17).

Figure 17: Viet Nam's services exports



Source: ITC Trade Map Database mirror data, 2016a.

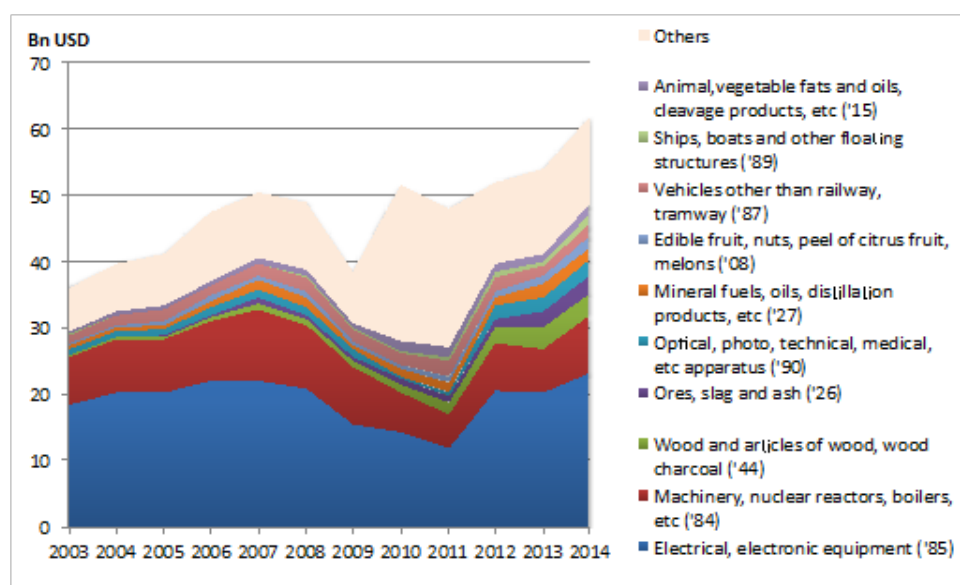
The Philippines

The export structure of the Philippines is more diversified, and includes more skill-intensive and higher value-added goods and services. The structure of merchandise exports is dominated by electrical and electronic equipment, which accounted for over 37 per cent of total merchandise exports in 2014 (figure 18). The relative importance of this sector has decreased during the past decade – in 2003 exports from this group were responsible for over half of total merchandise exports. The electronics sub-sector is also a key employer in manufacturing, employing around 2 million workers in 2012 (Semiconductor and Electronics Industries in the Philippines Foundation (SEIPI), 2016). In 2014, the second largest export group was industrial machinery, which accounted for 14 per cent of the total. The exports of wood and articles of wood, ores and slag each accounted for 5 per cent of exports. The share of high-skill and technology-intensive manufacturing in the merchandise exports of the Philippines was estimated to be around 18 per cent in 2012 (ILO and Asian Development Bank, 2014).

The main individual export products include:

- Monolithic integrated circuits, digital;
- Computer data storage units
- Builder's joinery and carpentry of wood
- Ignition wiring sets and other wiring sets used in vehicles, aircraft etc.
- Electronic micro-assemblies
- Parts and accessories of automatic data processing machines and units thereof
- Nickel ores and concentrates
- Photosensitive semiconductor device, photovoltaic cells and light emitting diodes
- Electronic integrated circuits, monolithic
- Static converters

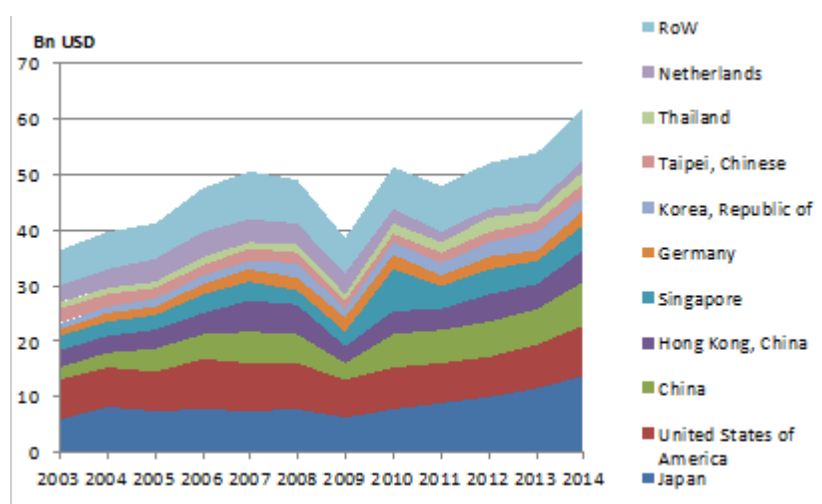
Figure 18: Philippines top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

The country's imports are also dominated by electrical and electronic equipment, fuel, industrial machinery and transport equipment. This points to a potentially high share of imports for further processing and re-exporting in these groups. At the level of individual products, parts of electronic circuits and data processing machines, petroleum oils, aircraft and automobiles, have been the main import products.

Figure 19: Philippines goods export markets

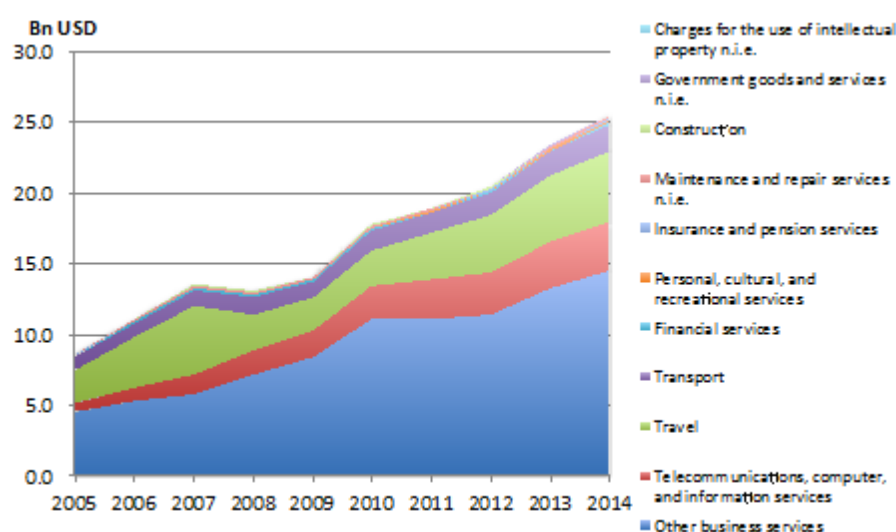


Source: ITC Trade Map Database mirror data, 2016a.

Japan was the largest trade partner of the Philippines in 2014, accounting for nearly a quarter of its exports and 8 per cent of its imports (figure 19). The share of the United States for exports and imports of the Philippines has decreased from 20 per cent and 22 per cent in 2003 to 14 per cent and 9 per cent in 2014, respectively. The importance of China has increased during the same period, as its share of exports increased from 6 per cent to 13 per cent, while its share of imports increased from 5 per cent to 15 per cent. The Philippine export markets are less diversified than its import source markets, and the combined share of its three largest export markets reached 50 per cent of total merchandise exports in 2014.

Trade in services has also become a key contributor to the Philippine economy. Exports of services started to pick up from around 2005 (figure 20). By 2014, the value of services exports reached US\$25.5 billion, while services imports amounted to US\$20.9 billion. Other business services accounted for 57 per cent of the export of services, primarily driven by technical, trade-related and other business services. This was followed by travel (21 per cent) and computer and information services (13 per cent). This reflects that BPO has become one of the most dynamically developing industries in the Philippines, claiming over 21 per cent of the world IT-BPO market in 2012 (OECD, 2012). The Business Processing Association of the Philippines estimated that export revenues from BPO increased from US\$1.3 billion in 2004 to US\$13.3 billion in 2013 (IT and Business Process Association of the Philippines, 2013).

Figure 20: Philippines services exports

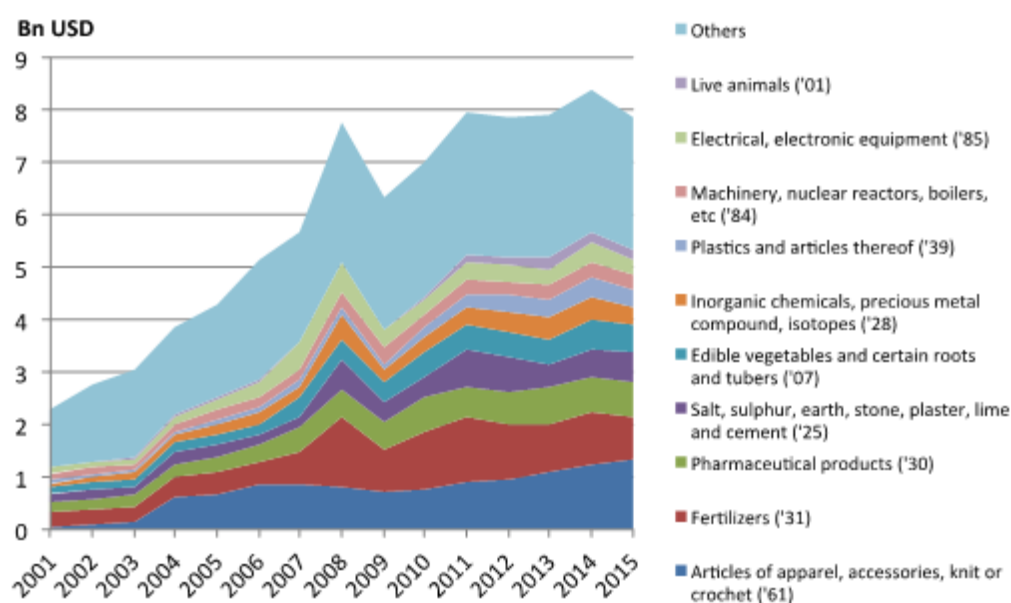


Source: ITC Trade Map Database mirror data, 2016a.

Jordan

Jordan's main exports include apparel and garments, fertilizers, and pharmaceutical products (figure 21). These three categories accounted for approximately one-third of Jordan's merchandise exports in 2015. Jordan's merchandise exports are relatively diversified, with over 40 per cent of goods exports generated by products outside of the ten largest product groups in 2015. The export of garments started to increase in 2003, following the signing of a free trade agreement with the United States. These exports are mainly supplied to developed markets, including the United States, Canada and the Netherlands. The exports of fertilizers and pharmaceuticals grew steadily during the past two decades. Pharmaceuticals and agricultural products are primarily supplied to neighboring Arab countries, while chemicals are exported to developing countries. Low technology-intensive manufacturing dominated Jordan's merchandise exports (International Trade Center, 2016b).

Figure 21: Jordan's main export product categories (HS 2)



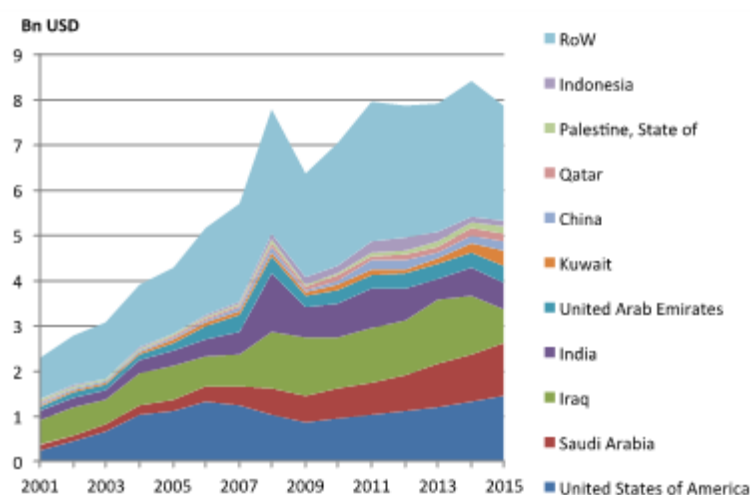
Source: ITC Trade Map Database mirror data, 2016a.

At the level of individual products, Jordan's main export items include:

- Garments, of cotton, knitted ('611420)
- Mineral/chemical fertilizers, potassic, in packages weighing > 10 kg ('310490)
- Natural calcium phosphates, aluminum calcium phosphates etc., unground ('251010)
- Garments, of other textile materials, knitted ('611490)
- Medicaments, in dosage ('300490)
- Tomatoes, fresh or chilled ('070200)
- Medicaments, formulated, in bulk ('300390)
- Sheep, live ('010410)
- Phosphoric acid and polyphosphoric acids ('280920)
- T-shirts, singlets and other vests, of cotton, knitted ('610910)

Jordan's main merchandise export markets include the United States, Saudi Arabia, Iraq, and the India, which accounted for 18 per cent, 15 per cent, 10 per cent and 7 per cent of total exports in 2015, respectively (figure 22). Due to the worsening security situation in Iraq and the Syrian Arab Republic, recent closures of the land trade routes resulted in Jordan's exports to Iraq falling by 34 per cent, and to the Syrian Arab Republic by over 40 per cent (World Bank, 2015a).

Figure 22: Jordan's goods export markets

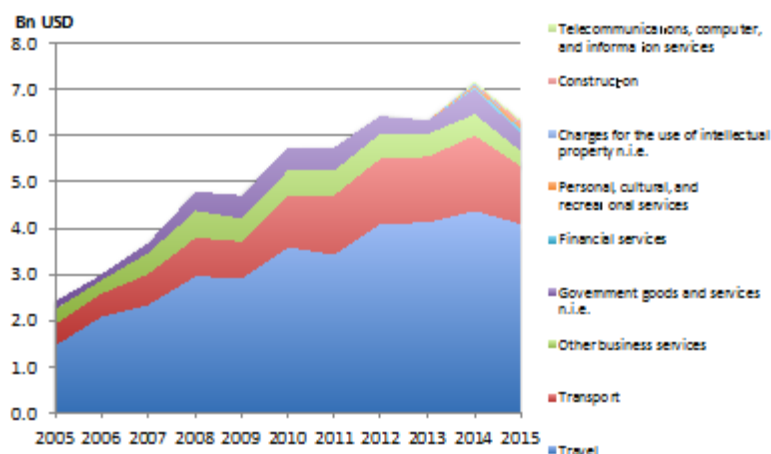


Source: ITC Trade Map Database mirror data, 2016a.

Jordan's merchandise imports are dominated by petroleum oils, followed by automobiles, gold, natural gas, medicaments, fabrics, mobile phones, and durum wheat. Saudi Arabia, China and the United States are the largest source countries of Jordan's imports.

Services exports have increased steadily between 2005–2015 (figure 23). Travel accounted for nearly two-thirds of services exports in 2015, followed by transport (20 per cent) and other business services (5 per cent).

Figure 23: Jordan's services exports

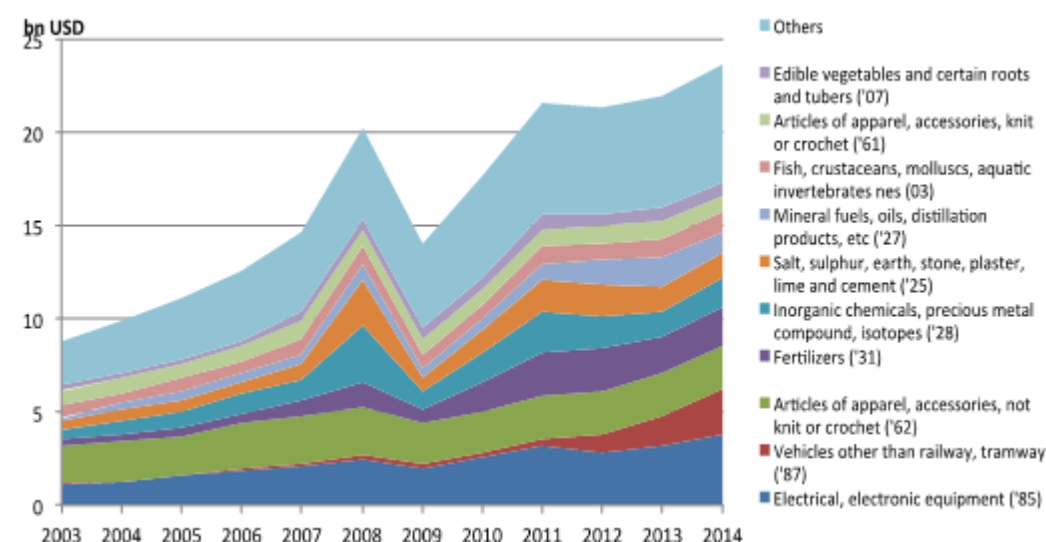


Source: ITC Trade Map Database mirror data, 2016a.

Morocco

Although the export structure of Morocco has become more diversified during the past decades, it is still concentrated around a few key products and sectors. Electrical and electronic equipment (16 per cent), vehicles (10 per cent), and textiles and apparel (14 per cent) are the largest product groups for exports (figure 24). Other key groups include products from mining, agriculture and the chemical industries. Between 2003 and 2014, the exports of vehicles, fertilizers, and mineral fuels grew the most dynamically.

Figure 24: Morocco's top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

At the level of individual products, various types of phosphates and phosphoric acid are responsible for around 17 per cent of total exports, and the value of exports from these commodities has more than tripled between 2003 and 2014. During this period, the exports of automobiles has increased most dynamically, accompanied by a similar increase in the exports of ignition wiring. Automobiles are fairly new export products for Morocco, and their production started to pick up only in the past 5 years, and by 2014, they were responsible for an estimated 14 per cent of Morocco's total exports.

Morocco's largest individual export products include:

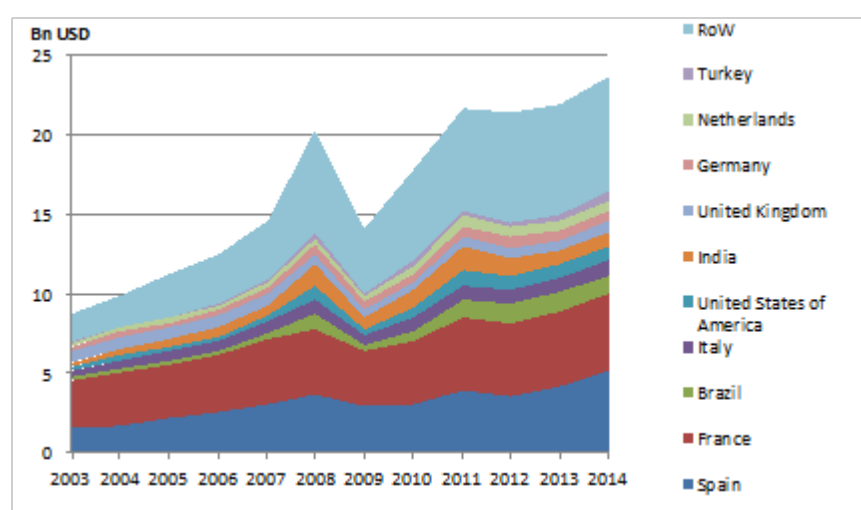
- Phosphoric acid and polyphosphoric acids ('280920)
- Ignition wiring sets and other wiring sets used in vehicles, aircraft, etc. ('854430)
- Automobiles with reciprocating piston engines displacing > 1000 cc to 1500 cc ('870322)
- Natural calcium phosphates, aluminum calcium phosphates etc., unground ('251010)
- Automobiles with diesel engine displacing more than 1500 cc to 2500 cc ('870332)
- Diammonium phosphate, in packages weighing more than 10 kg ('310530)
- Other petroleum oils and preparations ('271019)

- Monoammonium phosphate and mix thereof with diammonium phosphate, in pack<=10kg ('310540)
- Transistors, other than photosensitive transistors, nes ('854129)
- Sardines, sardinella and brisling or sprats ('160413)

Mineral fuels and oils dominate commodity imports, which accounted for nearly a quarter of imports in 2014. It is followed by groups of machinery, electrical, electronic and transport equipment, vehicles and parts for further assembly. The proportion and dynamics of these categories correspond to changes in the relevant groups of exports, reflecting assembly and re-exporting in these sectors.

Morocco's main trading partner is the EU, which is responsible for over 60 per cent of its exports, and over half of its imports, with France and Spain being the largest destination and source markets (figure 25).

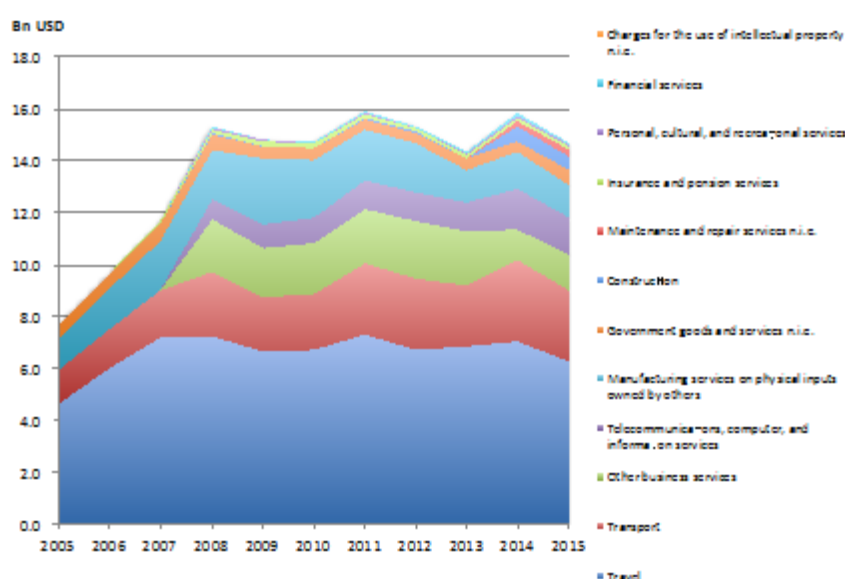
Figure 25: Morocco's goods export markets



Source: ITC Trade Map Database mirror data, 2016a.

Services play a key role in Morocco's overall trade performance (figure 26) with the contribution to GDP at around 20 per cent over the past decade. Travel and tourism represented half of service exports in 2015. Travel (43 per cent), transport (19 percent) and other business services (9 percent) were the largest service export categories.

Figure 26: Morocco's services exports

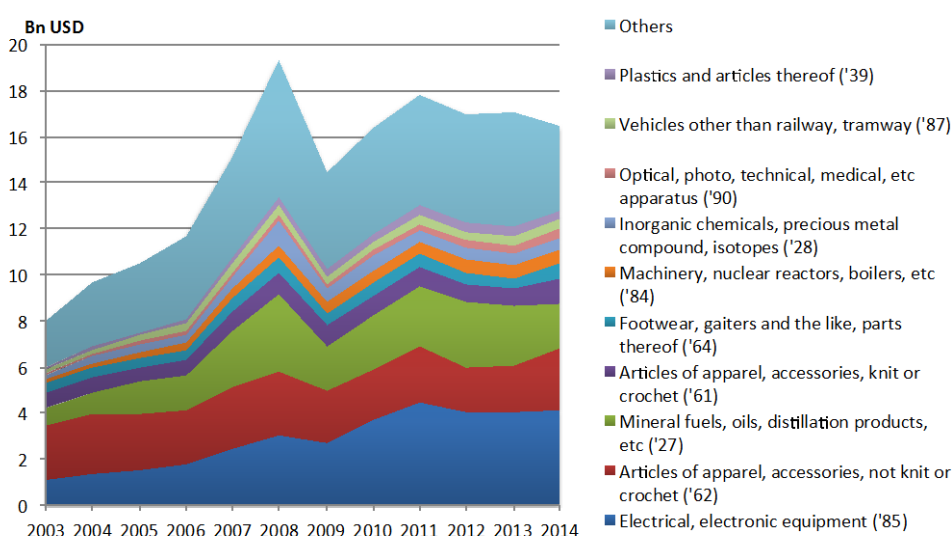


Source: ITC Trade Map Database mirror data, 2016a.

Tunisia

Tunisia's exports are also concentrated around a few products and sectors. Electrical and electronic equipment, textiles and mineral fuels and oils are the largest product groups for exports (figure 27). In 2014, nearly two-thirds of Tunisia's merchandise exports came from these groups. Although the technological content of Tunisia's exports has increased in recent years, the share of high-technology exports amounted only to 6 per cent in 2011 (World Bank, 2014c). Tunisia's manufacturing trade is dominated by assembly and re-exporting for the value chains of European companies, primarily in low-cost production and low value-added activities.

Figure 27: Tunisia's top ten export product groups (HS 2)



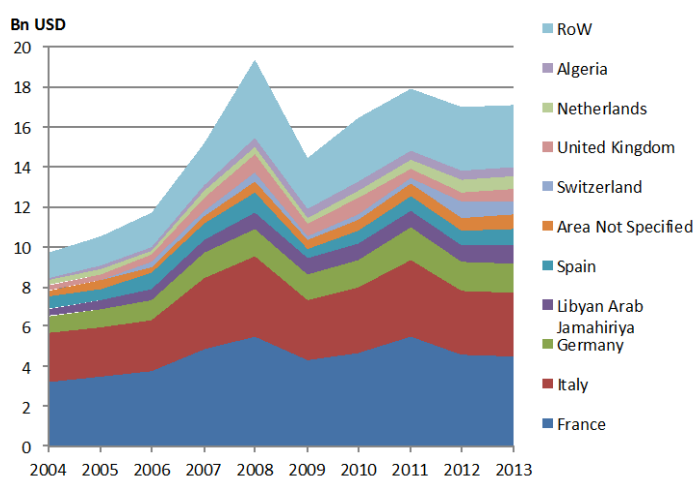
Source: ITC Trade Map Database mirror data, 2016a.

In terms of individual products, mineral oils have the largest export share. The value of petroleum oil exports increased five-fold between 2003 and 2011. The exports of ignition and other wiring and cable sets has increased the most during the past decade, due to the development of automotive and aeronautics component manufacturing. Starting from a low value in 2003, the value of their exports has increased to over US\$1.2 billion in 2014. The process of diversification of exports is also reflected by the recent appearance of new products, such as reception apparatus and electrical conductors being among the biggest export items. Agricultural products account for around ten per cent of total exports, primarily including dates, olive oil, citrus and vegetables. Tunisia's largest export items include:

- Petroleum oils and oils obtained from bituminous minerals, crude ('270900)
- Ignition wiring sets and other wiring sets used in vehicles, aircraft etc. ('854430)
- Men's /boys trousers and shorts, of cotton, not knitted ('620342)
- Women's /girls trousers and shorts, of cotton, not knitted ('620462)
- Reception apparatus for television, whether or not incorporating radio ('852871)
- Electric conductors, insulated, fitted ('854442)
- Electrical app for switching g/protective electric circuits ('853690)
- Light petroleum oils and preparations ('271012)
- Other petroleum oils and preparations ('271019)
- Dates, fresh or dried ('080410)

Tunisia's main trading partner is the EU, which is responsible for around 80 per cent of its exports, and over half of its imports (figure 28). The largest destination countries are France (28 per cent), Italy (19 per cent) and Germany (10 per cent).

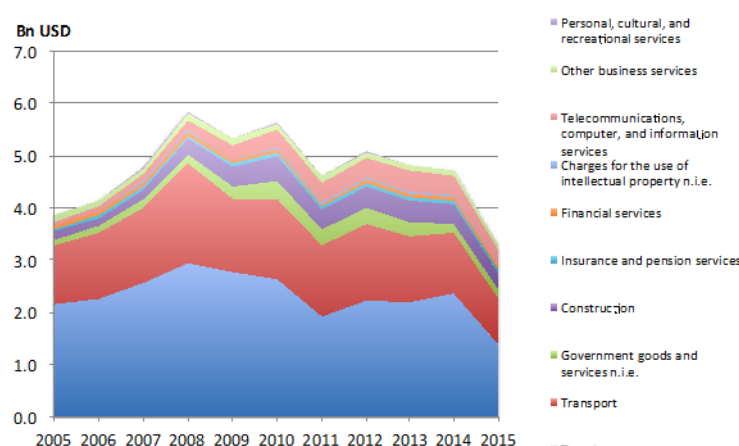
Figure 28: Tunisia's goods export markets



Source: ITC Trade Map Database mirror data, 2016a.

Tunisia's service exports equal to around 20 per cent of GDP, with tourism being the largest service exporting sector. It accounted for 42 per cent of service exports in 2015, and it was followed by transport at 27 per cent (figure 29). The data reflects that Tunisia's tourism sector has not been able to recover from the effects of the global financial crisis, the Arab Spring and ongoing security concerns in the region.

Figure 29: Tunisia's service exports

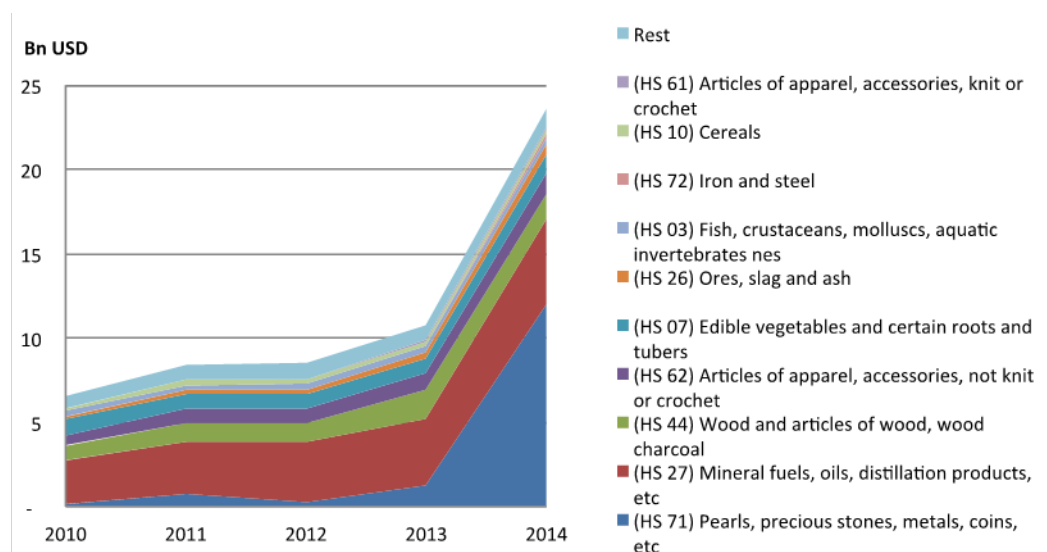


Source: ITC Trade Map Database mirror data, 2016a.

Myanmar

Myanmar's key exports include minerals, and unprocessed and raw agricultural, fishery and forestry products (figure 30).

Figure 30: Myanmar's top ten largest export product groups (HS 2)



Source: ITC Trade Map Database, mirror data, 2016a; product data for Myanmar is available from 2010.

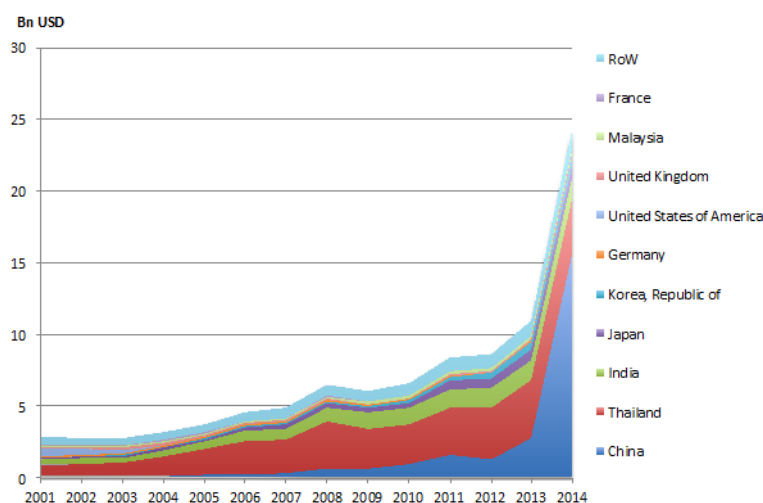
Between 2010–2013 mineral fuels, oils, and distillation products were Myanmar's largest export product groups, accounting for over 20 per cent of goods exports in 2014. The export of pearls, precious stones and metals increased significantly in 2013, and by 2014 this product group has become Myanmar's largest export group, with a share of over 50 per cent of goods exports. Myanmar's only labour-intensive manufacturing export group is apparel and accessories, which represented around 7 per cent of goods exports in 2014. Garment exports started to rebuild following the lifting of US trade sanctions. Exports of wood and articles of wood have nearly doubled between 2010–2014, amounting to 6 per cent of goods exports in 2014. Edible vegetables, roots and tubers have been responsible for another 5 per cent of the goods exports.

Myanmar's main individual export products include:

- Petroleum gases and other gaseous hydrocarbons
- Precious stones (other than diamonds) and semi-precious stones
- Dried leguminous vegetables, shelled, whether or not skinned or split
- Wood in the rough, whether or not stripped of bark or sapwood
- Fish, fresh or chilled, excluding fish fillets
- Natural rubber, balata, gutta-percha, guayule, chicle
- Rice
- Men's or boys' suits, ensembles, jackets, blazers, trousers
- Crustaceans, whether in shell or not
- Men's or boys' shirts

In 2014 the top three destinations for Myanmar's merchandise exports were China (64 per cent), Thailand (16 per cent), and India (6 per cent) (figure 31). The largest source countries for merchandise imports were China, Singapore and Thailand. The largest product groups for imports were machinery and transport equipment, petroleum oils, other than crude, and mineral fuels and lubricants.

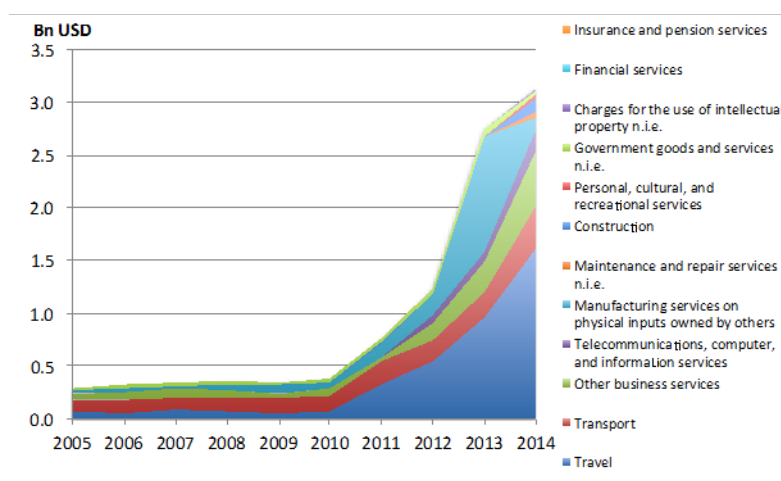
Figure 31: Myanmar's goods export markets



Source: ITC Trade Map Database mirror data, 2016a.

Trade in services in Myanmar started to pick up recently in 2010, and remains at modest levels (figure 32). Myanmar's largest service exports in 2014 were travel (51 per cent), other business services (16 per cent), and transport (13 per cent).

Figure 32: Myanmar's services exports

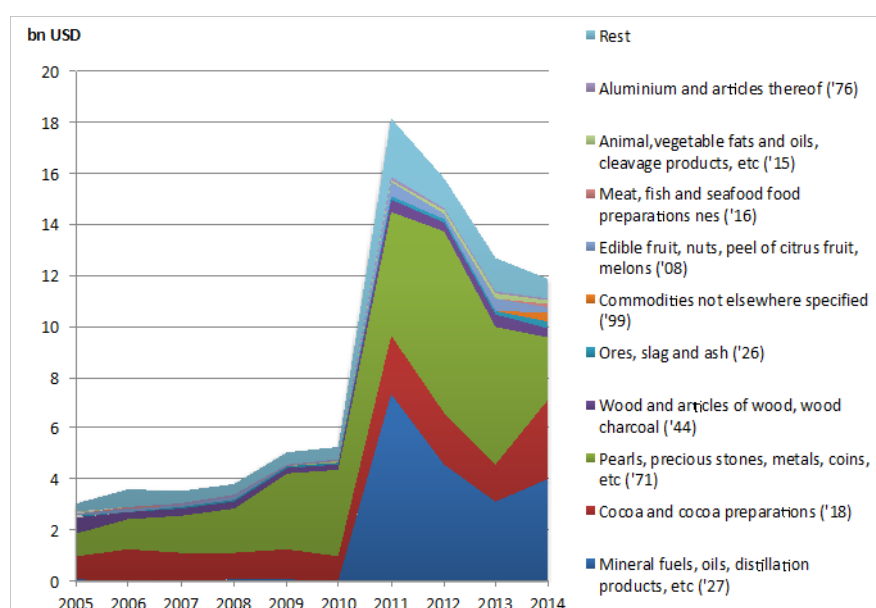


Source: ITC Trade Map Database mirror data, 2016a.

Ghana

Ghana's export structure is based around a few primary products and mineral resources, such as gold, cocoa, crude oil, manganese, bauxite and timber (figure 33).

Figure 33: Ghana's top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

In particular, oil, cocoa, and gold combined are responsible for over 80 per cent of Ghana's exports. Oil, a fairly recent discovery, has now become the largest export commodity. Oil exports started to increase from 2011, and by 2014, oil exports now represent for over a third of Ghana's exports. The remaining share of exports comes from metal and metal products, wood and wood products, plastics and rubber, fats and oils, and pharmaceuticals, cosmetics and related industries.

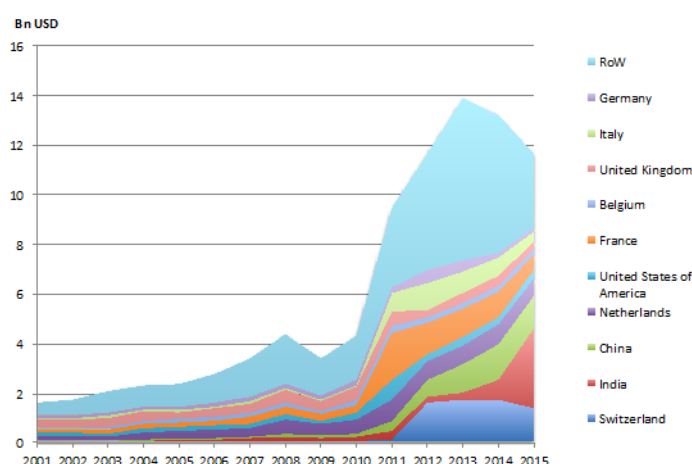
Ghana's largest individual export products include:

- Petroleum oils and oils obtained from bituminous minerals, crude ('270900)
- Cocoa beans, whole or broken, raw or roasted ('180100)
- Gold in unwrought forms non-monetary ('710812)
- Cocoa paste not defatted ('180310)
- Commodities not elsewhere specified ('999999)
- Cocoa butter, fat and oil ('180400)
- Manganese ores and concentrates etc. ('260200)
- Logs, non-coniferous nes ('440399)
- Tuna, skipjack and bonito, prepared/preserved, whole/in pieces ('160414)
- Cocoa powder, not containing added sugar or other sweetener ('180500)

Besides relying heavily on a few primary commodities, production and exports are highly concentrated among just a few companies. For example, in 2012 five firms accounted for over 70 per cent of gold production and exports; seven firms for 85 per cent of cocoa production and exports; and one company accounts for all exports of bauxite and alumina (Sutton and Kpentey, 2012).

Ghana's largest export markets in 2015 included Switzerland (13 per cent), India (27 per cent), and China (11 per cent), primarily through exporting gold, oil, and cocoa (figure 34).

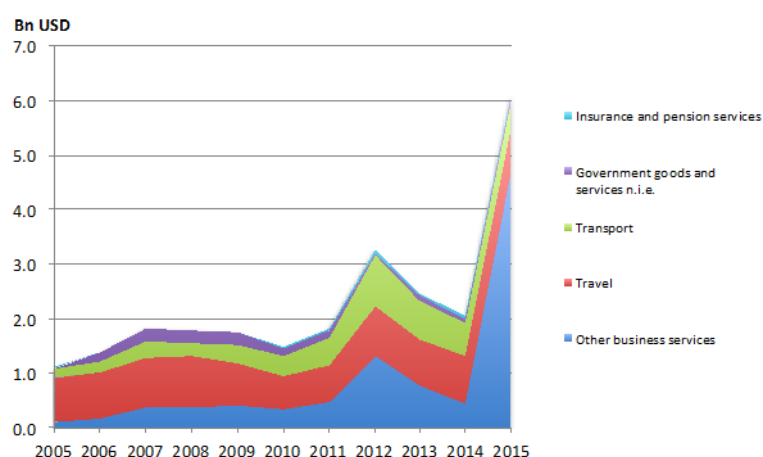
Figure 34: Ghana's goods export markets



Source: ITC Trade Map Database mirror data, 2016a.

Ghana's service exports have been driven by one-off movements in other business services, which include technical, trade-related and other business services (figure 35). These amounted to US\$4.7 billion in 2015.

Figure 35: Ghana's service exports

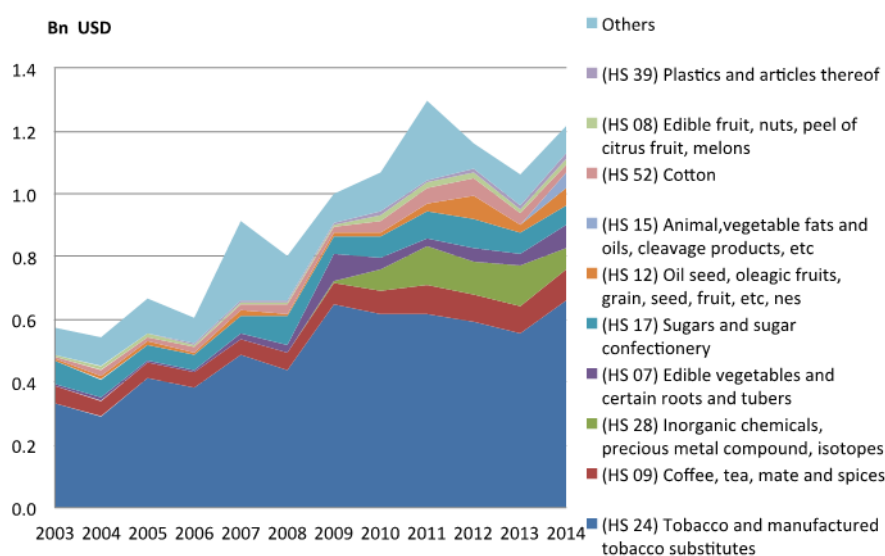


Source: ITC Trade Map Database mirror data, 2016a.

Malawi

Most of Malawi's commodity exports are unprocessed or raw commodities from agriculture, and resources from mining (figure 36).

Figure 36: Malawi's top ten export product groups (HS 2)



Source: ITC Trade Map Database mirror data, 2016a.

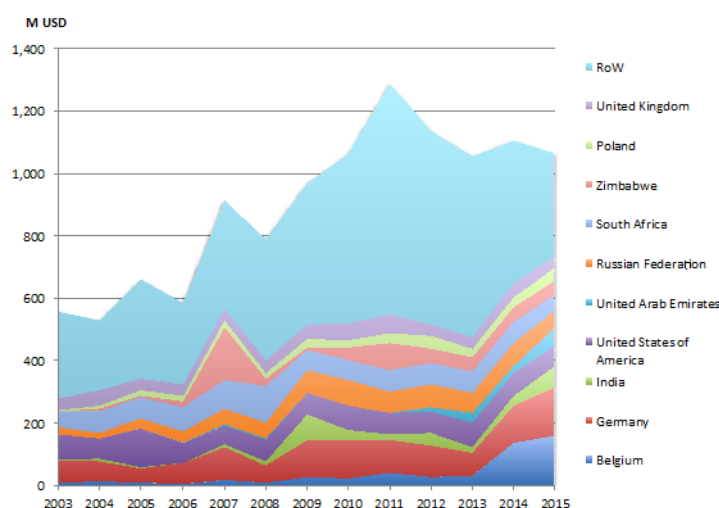
Agricultural products accounted for around 80 per cent of merchandise exports in 2014. Over two-thirds of Malawi's exports come from the food, animal, beverage and tobacco commodity groups, followed by crude materials and vegetable oils, which account for over a fifth of total exports.

For individual products, the largest export commodity of Malawi is unmanufactured tobacco and tobacco refuse, which is responsible for nearly half of exports. It is followed by sugar, tea, and raw cotton. The largest export items include:

- Unmanufactured tobacco, tobacco refuse
- Cane or beet sugar and chemically pure sucrose, in solid form
- Uranium or thorium ores and concentrates
- Tea, whether or not flavored
- Ground-nuts, not roasted or otherwise cooked, whether or not shelled or broken
- Maize (corn)
- Dried leguminous vegetables, shelled, whether or not skinned or split
- Cotton, not carded or combed
- Articles for the conveyance or packing of goods, of plastics
- Other nuts, fresh or dried, whether or not shelled or peeled

The share of manufactured exports in total exports has been declining, mainly due to the decline in garment exports. Apparel exports from Malawi to South Africa accounted for most of Malawi's garment exports, which enjoyed duty free trade with a simple rule of origin under the South African Trade Community (SADC) Trade Protocol. This agreement was revoked in 2011, and as a result several apparel plants, employing approximately 4,000 workers have closed down (World Bank, 2014d). At the same time, the exports of plastic household products increased from less than US\$1 million in 2004 to over US\$25 million in 2011, due to trade with a major South African retail chain store.

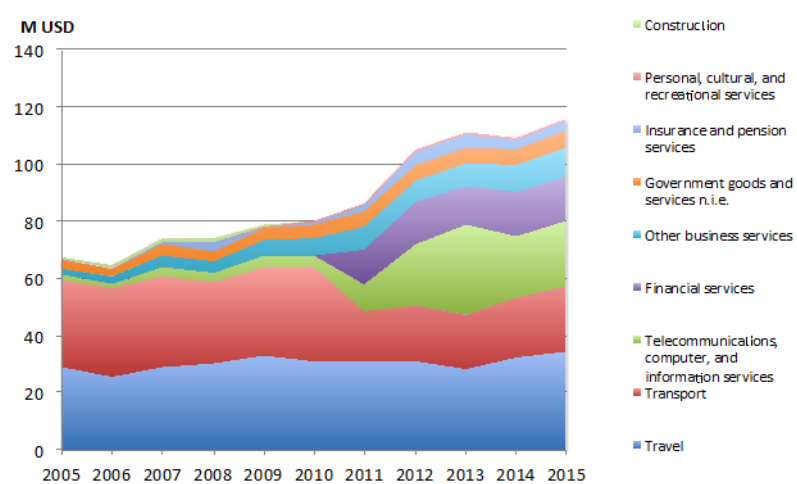
Figure 37: Malawi's goods exports markets



Source: ITC Trade Map Database mirror data, 2016a.

In 2015 the largest export markets of Malawi were Belgium (15 per cent), Germany (15 per cent) and India (6 per cent) (figure 37). The value of Malawi's service exports has remained modest during the past decade (figure 38), amounting to US\$116 million in 2015. Travel and transport have been the main service export categories. However, financial services and information technology and telecommunications also started increasing after 2011.

Figure 38: Malawi's service exports



Source: ITC Trade Map Database mirror data, 2016a.

4. Exports and employment demand

This section presents further analysis to highlight the extent to which trade increases have affected employment and the demand for skills. In the developing countries examined, joining the supply chains of global companies has been a key step for establishing and developing manufacturing exports. In line with the existing domestic manufacturing base and the pool of skilled labour, the development of domestic manufacturing sectors has been a gradual process. Typically, resource- and labour-intensive manufacturing have been the first subsectors to attract foreign companies. This includes textiles, garments, and footwear, particularly in those countries where cultural norms are supportive of female employment and education, like in Cambodia. Malawi started exporting plastics and plastic articles through joining a regional supply network of South African companies (World Bank, 2014d).

The next phases of the development of manufacturing exports include low-skill and technology-intensive products like wiring and cables, followed by medium-skill and technology-intensive manufacturing including electronics and vehicle parts, which are key exports of countries like Morocco, Tunisia and Viet Nam. In countries where skilled labour is available, more advanced high-skill and technology-intensive manufacturing exports have appeared, including more complex electronic equipment in the Philippines, and pharmaceuticals in Jordan.

Besides the development of the exporting sector itself, exports can also contribute to the development of other domestic sectors, and generate income and employment indirectly through linkages to other sectors in the domestic economy. Through backward linkages exports can induce activity in sectors which supply raw materials and intermediate inputs to the exporting sector. Through forward linkages they can generate activity in sectors which use outputs from the exporting sectors as inputs to their production, and services which are related to the distribution and marketing of the exported products. However, in global supply chains the opportunities for development through linkages is often limited, as much of these exports cover the assembly of imported parts and materials for re-exporting.

As the opening up of these countries has progressed, the exports of services have also increased. In those countries where security and safety is sustained and basic infrastructure is available, tourism has become an important contributor to GDP, exports and employment, as is the case in Cambodia and Viet Nam. In those countries where skilled labour is available, and particularly those which have historic ties and share the language with major developed economies, BPO and information technology outsourcing have developed rapidly, as in Morocco and the Philippines. The development path includes moving from call centers to higher value-added activities, including back office services.

4.1. Skill intensity of exports

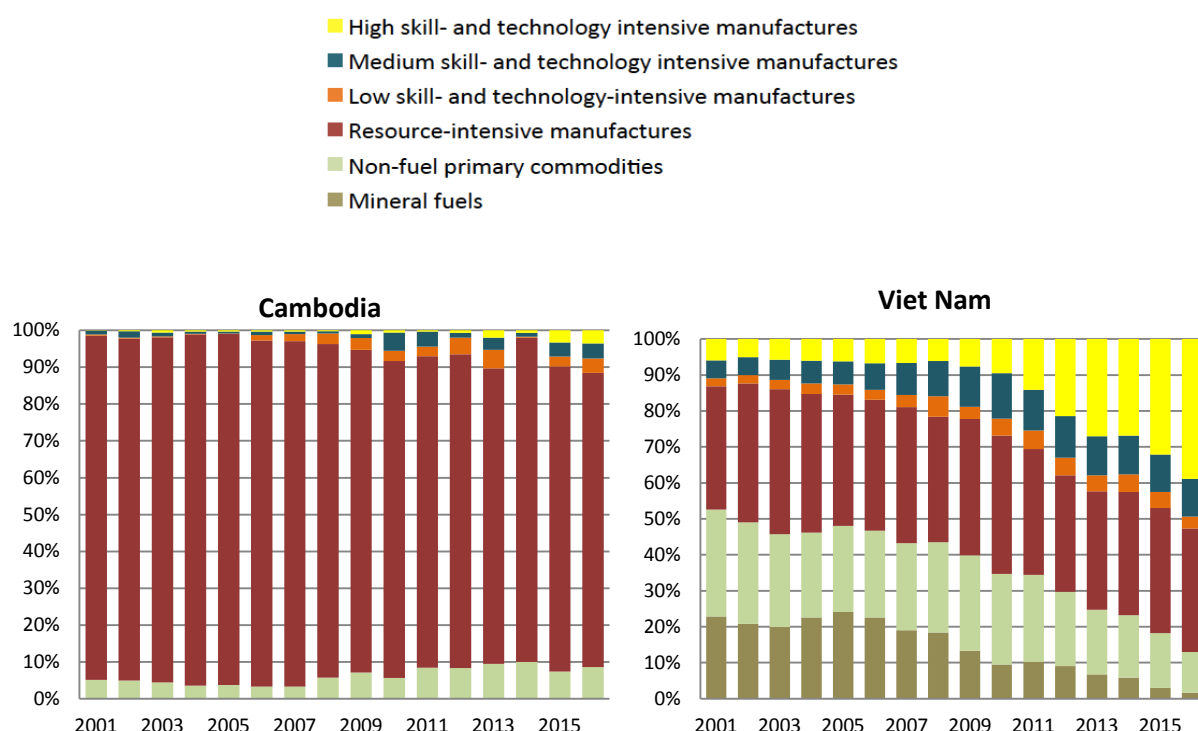
This section focuses on trends in the skill and technology intensity of merchandise exports between 2001–2016. The analysis is based on merchandise export data (HS4 level, directly reported) from the ITC Trade Map Database, as discussed in the “Key export products and sectors” section above, and the UNCTAD classification of export products by skill and technology intensity. This classifies groups of merchandise exports (at the

HS4 level) into six categories based on their level of skill and technology content, as proposed by Basu and Das (2011 and forthcoming). The categories include:⁶

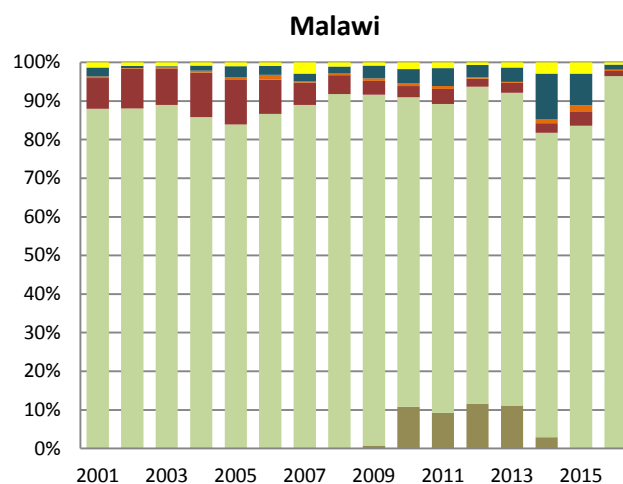
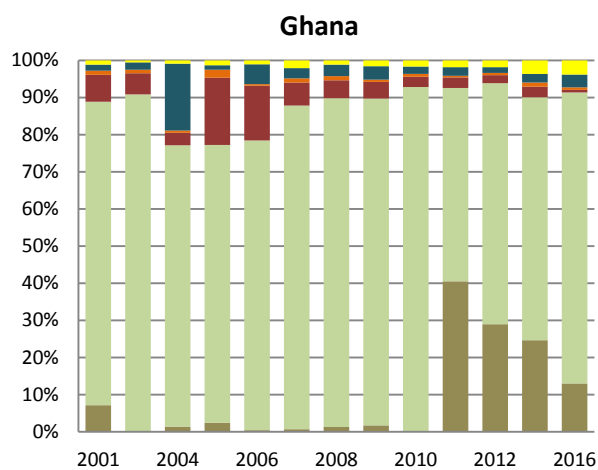
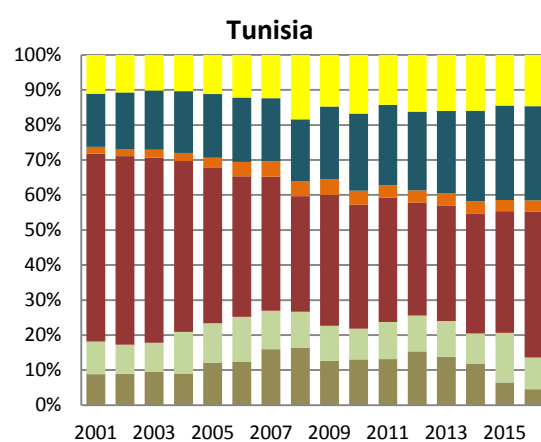
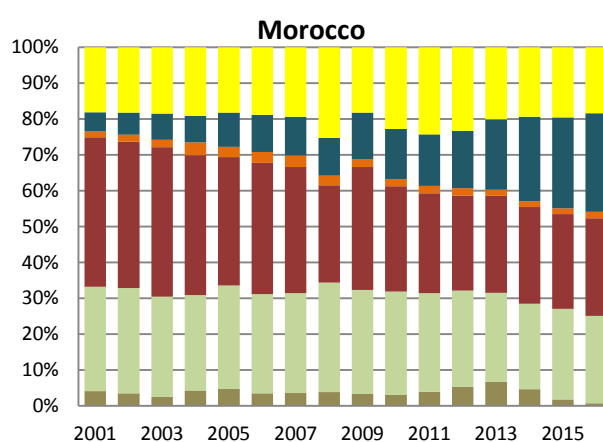
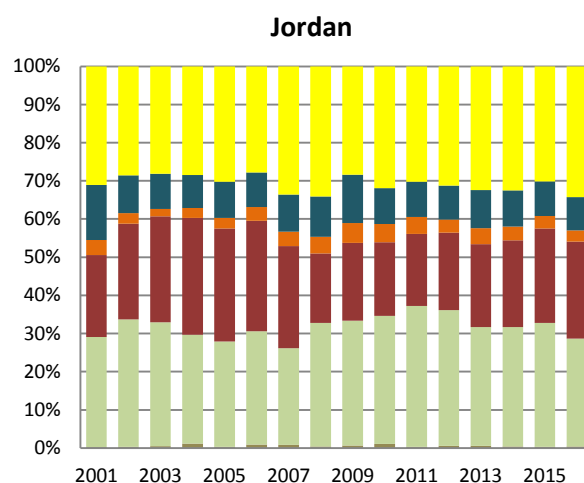
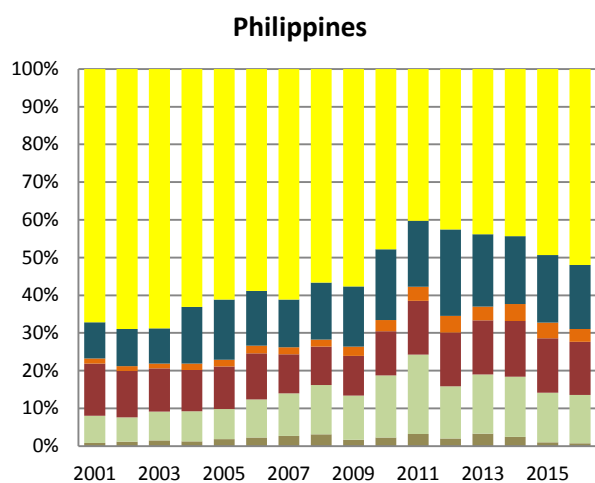
- Non-fuel primary commodities (for example wheat, meslin, rice, fruit, etc.)
- Mineral fuels (petroleum oils, lignite, coke, etc.)
- Resource- and labour-intensive manufacturing (fabrics, yarn, textiles, footwear, garments, etc.)
- Low-skill and technology-intensive manufacturing (metals, tubes, wires, cables, etc.)
- Medium-skill and technology-intensive manufacturing (electronics, machinery, parts and accessories, tools, vehicle parts, etc.)
- High-skill and technology-intensive manufacturing (pharmaceuticals, fertilizers, optical instruments, aircraft parts, etc.)

The following diagrams reflect the marked differences in the structure of exports by skill intensity across the countries examined, as well as trends in moving towards exporting more sophisticated products over the past 16 years (figure 39).

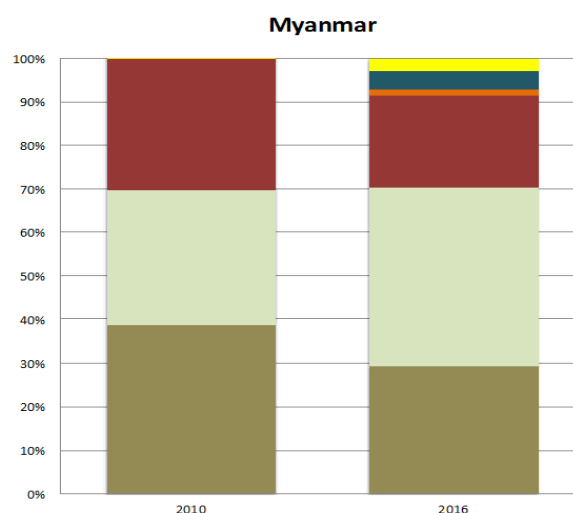
Figure 39: Merchandise exports by skill and technology intensity



⁶ The data also includes “uncategorized” products, which account for 0.1 per cent to 4.7 per cent of the total value of exports every year. Therefore, while the shares of the different categories are indicative of trends and magnitudes, they do not fully cover exports.



Source: Author's calculations based on ITC Trade Map Database, 2016a



Source: Author's calculations based on ITC Trade Map Database, 2016a.

Due to the dominance of textiles and garments, resource-intensive manufacturing constitutes around 80 per cent of Cambodia's merchandise exports. However, with the more recent introduction of electronics, bicycles and vehicle parts production, the share of low-, medium-, and high-skill and technology-intensive manufacturing has increased to over 11 per cent. In the same period, Viet Nam's export structure has made the biggest improvement in moving towards exporting higher skill and technology-intensive products. Starting from just 6 per cent of merchandise exports in 2001, the share of high-skill and technology-intensive manufacturing increased to over 38 per cent by 2016, mainly due to increasing exports of telecommunications and office equipment. The share of resource-intensive manufacturing has remained stable, at around one-third of merchandise exports due to the continued importance of textiles and garments. The share of medium-skill and technology-intensive manufacturing has doubled in this period due to the increase in machinery and electronics exports. The Philippines has the most advanced export structure in terms of skill and technology intensity, including the highest share of high-skill and technology-intensive manufacturing, although this has decreased from 66 per cent to 52 per cent over the past 15 years. At the same time, the share of medium-skill and technology-intensive products has increased from 9 per cent to 17 per cent.

High-skill and technology-intensive manufacturing account for over one-third of Jordan's merchandise exports. However, non-fuel primary commodities, such as vegetables and live animals, also account for around 30 per cent. The shares of the product groups have remained fairly stable over the past 15 years. Morocco's export structure shows similar trends. Around one-quarter of Morocco's merchandise exports come from non-fuel primary commodities, while high-skill and technology-intensive manufacturing account for nearly one-fifth. However, the share of medium-skill and technology-intensive manufacturing (including vehicles and electronics) has increased strongly from around 5 per cent in 2001 to 27 per cent in 2016, while the share of resource-intensive manufacturing (mainly apparel) decreased from 42 per cent to 27 per cent. This resulted in a small improvement in the overall skill and technology content of exports. Tunisia's exports are dominated by resource-intensive manufacturing, due to the large share of apparel and footwear exports. However, their share has declined from 53 per cent to 41 per cent from 2001 to 2016. Due to increasing exports of electronics and machinery, medium-skill and technology-intensive manufacturing constituted one-quarter of Tunisia's merchandise exports in 2016, while high-skill and technology-intensive manufacturing accounted for nearly 15 per cent.

The export structures of Ghana, Malawi and Myanmar reflect the dominance of non-fuel primary commodities, which on average have accounted for 78 per cent of Ghana's

exports, and for 85 per cent of Malawi's exports through the past fifteen years.⁷ In Myanmar, non-fuel primary commodities accounted for 41 per cent of merchandise exports, resource-intensive manufacturing for 21 per cent, and all (low, medium, and high) skill-intensive manufacturing for 9 per cent in 2016. The share of technology-intensive manufacturing is very low in these countries, and they have not been able to achieve significant improvement in the skill and technology content of their exports.

4.2. Value added of exports

The analysis of trade data provides insight into the evolution of exports based on gross values, which include the direct value added in the domestic sector plus domestic and foreign intermediate inputs. The analysis of value-added chains in export sectors enriches this picture by identifying economy-wide linkages between the exporting sector and other sectors in the economy, which either use the value added from this sector as inputs to their exports (forward linkages), or supply value-added inputs for the production of exports in the particular sector (backward linkages). Thus, the analysis of trade in value-added terms takes into account both the direct and indirect activity which is generated through exports in a particular sector. The analysis is based on the World Bank's Export of Value Added Database.⁸ Of the wealth of information available from the database, it focuses only on the direct and indirect value added in the top ten exporting sectors⁹ through both forward and backward linkages to other sectors of the economy. This helps to identify which sectors play the most important role in exports, including the inputs they provide to the production of exports in other sectors; and the inputs they use for the production of exports from all other sectors. These linkages also reflect the extent of integration between exporting sectors and the rest of the domestic economy through their interconnectedness to the domestic production chain.

Figures 40 to 46 show the ten largest export sectors based on their total direct and indirect value added in 2011 in the countries examined, through forward linkages on the first chart, and backward linkages on the second chart.

While primary agriculture, distribution and trade, transport, other primary goods and business and ICT services do not appear as key exporting sectors in Cambodia, they contributed significantly to exports indirectly, through providing inputs for the production of exports (figure 40). At the same time, the exports of apparel, textiles, leather products, chemicals and processed food generated activity and income in other sectors of the economy through input requirements. In Viet Nam, inter-linkages between the exporting sectors and other sectors of the economy seem to be broader (figure 41). Primary agriculture and other primary goods, energy and trade enabling services, such as distribution, trade, business and ICT made significant indirect contributions to exports through forward linkages. The chart on backward linkages reflects that the key manufacturing export sectors generated substantial activity in other sectors through backward linkages.

⁷ Detailed product level data is not available for Ghana for 2002, 2014, and 2015; and it is only available for 2001 and 2016 for Myanmar.

⁸ The World Bank's Export of Value Added Database is available at <https://wits.worldbank.org/analyticaldata/analyticaldata.aspx>. The database does not cover Myanmar and Jordan.

⁹ Out of 26 sectors of the economy, including nine commercial services sectors, three primary sectors and 14 manufacturing sectors as defined in the Global Trade Analysis Project database (World Bank, 2017).

Figure 40: Cambodia – Direct and indirect value added in exports, top ten sectors

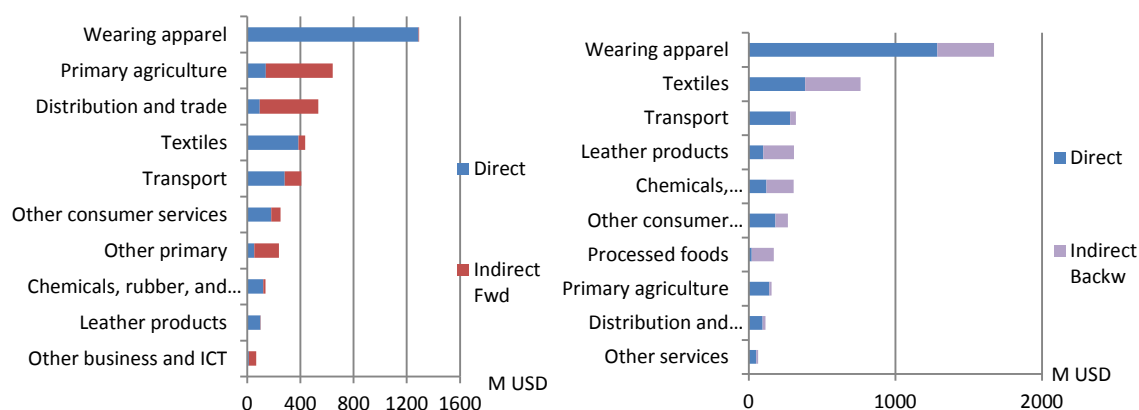
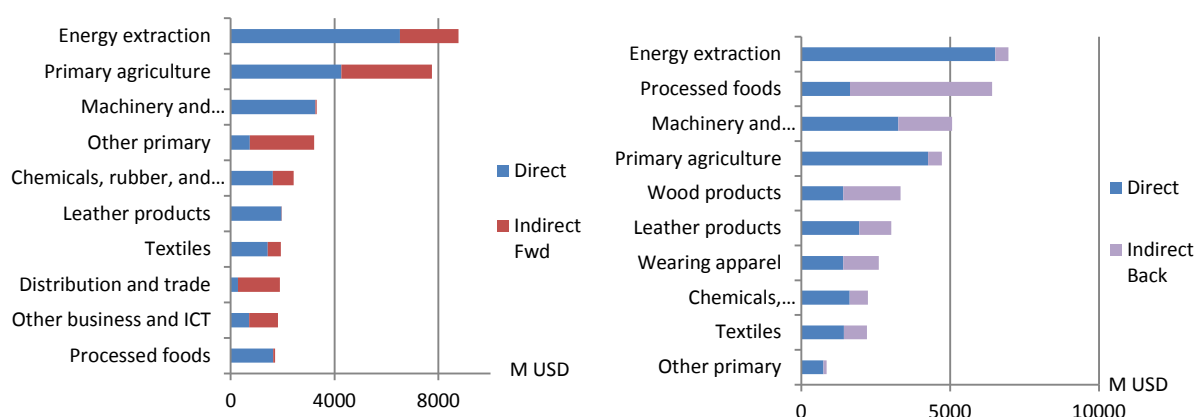


Figure 41: Viet Nam – Direct and indirect value added in exports, top ten sectors



Exporting sectors generate relatively less indirect value added compared to direct value added in the Philippines (figure 42). In 2011, distribution and trade, primary agriculture, other primary products, energy, business and ICT, and transport generated the largest value added through providing inputs to the exports in other sectors. Regarding backward linkages, machinery and equipment and processed food exports were the main sources of generating indirect value added in other sectors.

Although at lower nominal values, exporting sectors seem to have established broad links across the economy in Tunisia and Morocco (figures 43 and 44). Distribution and trade, and transport are key enablers of exports in other sectors, while primary agriculture and energy are key providers of inputs for the production of exports in both countries. In Tunisia, exports from machinery and equipment, processed food, and apparel were the biggest sources of demand for inputs from other sectors, while in Morocco exports from the chemicals, rubber and plastic products sector generated most value added through backward linkages.

Figure 42: Philippines – Direct and indirect value added in exports, top ten sectors

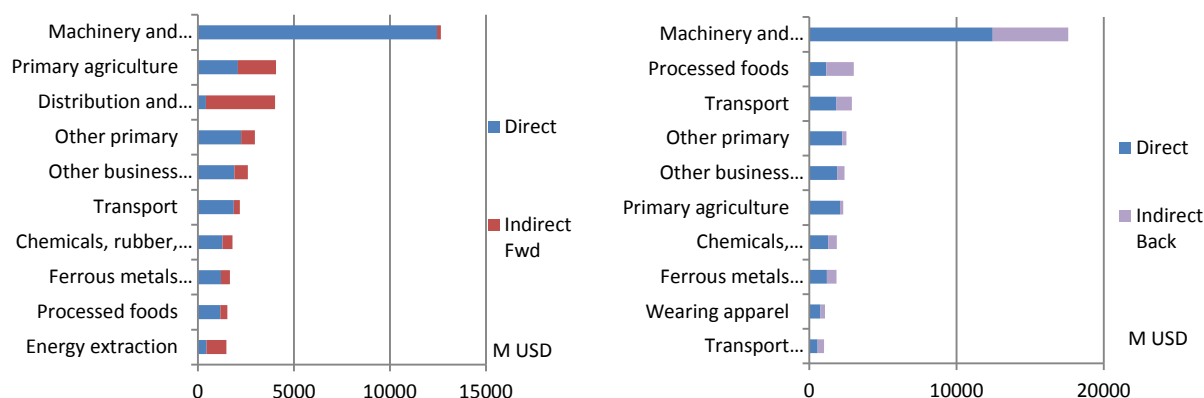


Figure 43: Tunisia – Direct and indirect value added in exports, top ten sectors

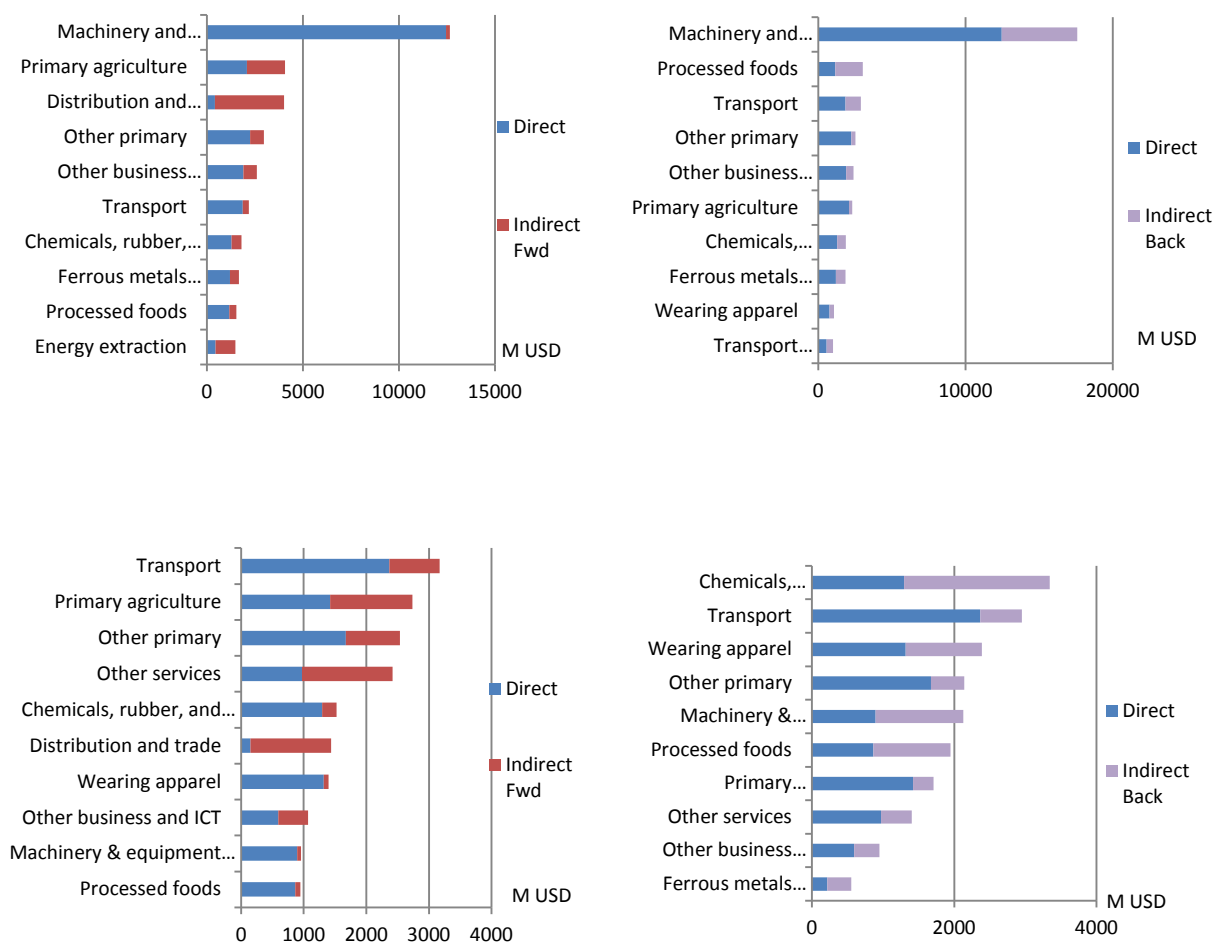
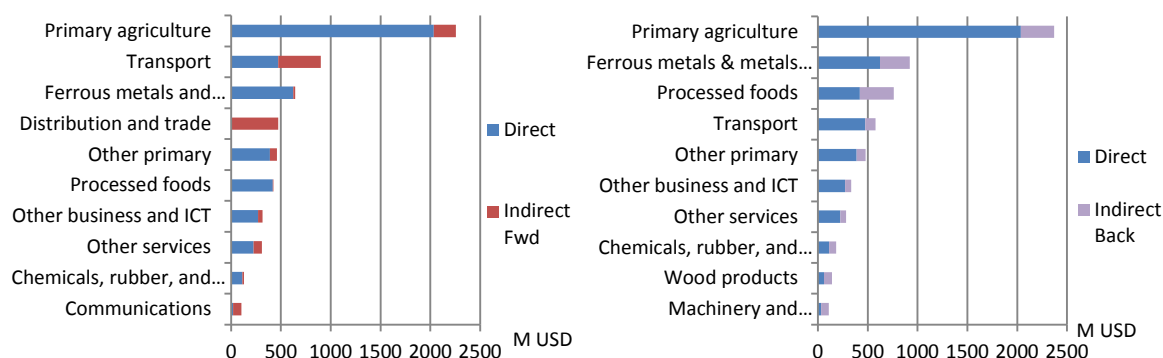


Figure 44: Morocco – Direct and indirect value added in exports, top ten sectors



Despite the importance of primary agriculture exports in Ghana and Malawi, the contribution of the sector to exports in other sectors in these countries is limited (figures 45 and 46). This reflects that agricultural products are mainly exported in unprocessed form, and higher value-added processing takes place in the importing countries. In Ghana, distribution and trade, and transport provide significant inputs to the exporting sectors, while in Malawi indirect value added in finance and insurance are also important. The extent of backward linkages is limited in both countries. In Ghana, it is also noticeable that exports of ferrous metals and metals are exported in unprocessed form and do not generate much further activity in the economy. They generate limited indirect value added through backward linkages, presumably mainly related to transportation and handling.

Figure 45: Ghana – Direct and indirect value added in exports, top ten sectors

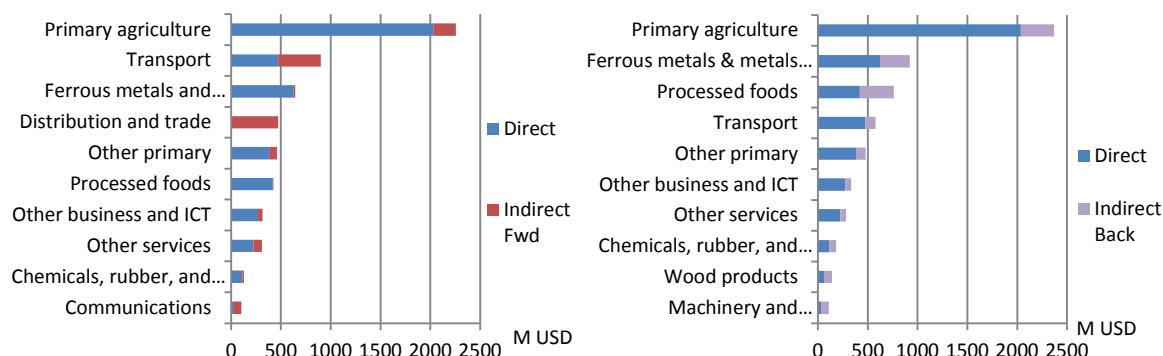
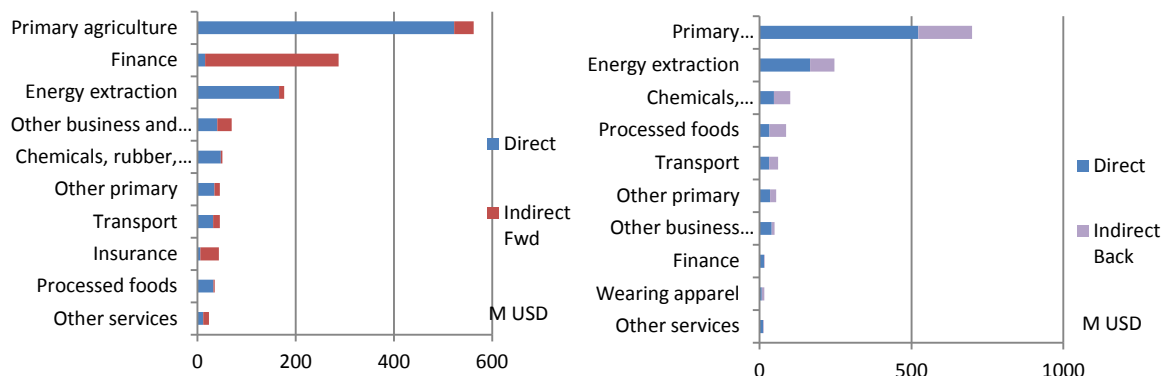


Figure 46: Malawi – Direct and indirect value added in exports, top ten sectors



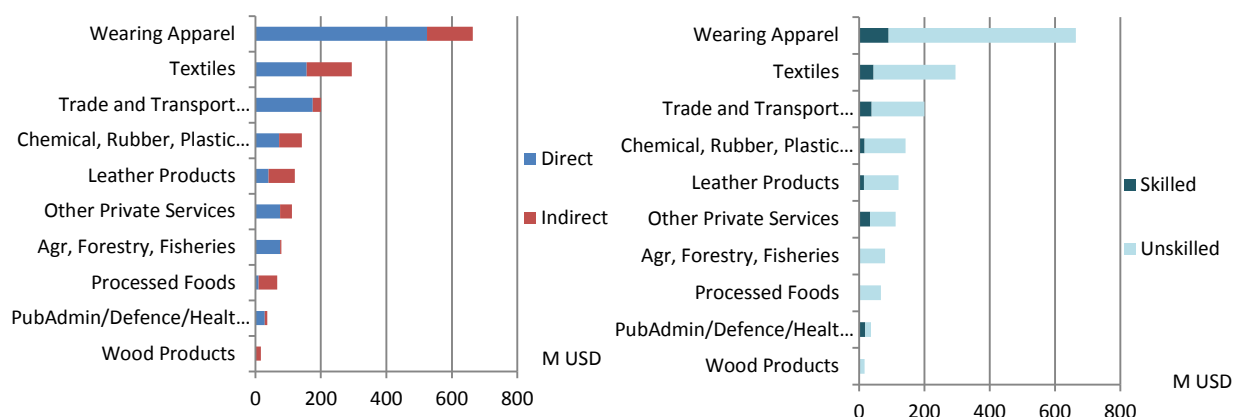
Source: Data from World Bank's World Integrated Trade Solution, 2017, available at <https://wits.worldbank.org/analyticaldata/analyticaldata.aspx> (accessed 5 Jun. 2017).

4.3. Labour content of exports

This section provides insight on the labour value-added content of exports in the countries examined, based on the World Bank's Labor Content of Exports (LACEX) database.¹⁰ The database provides an estimate of the direct contribution of labour to exports in a particular sector, and the indirect contribution of labour either through contributing to other sector exports through producing intermediate inputs (forward linkages); or the contribution of labour from all other sectors to a particular sector's exports (backward linkages). This analysis provides a more detailed picture on the significance of exports in generating employment and income across the domestic economy. Of the wealth of information available from the LACEX database, this analysis focuses only on the ten largest total labour value-added export sectors in 2011, through backward linkages split by direct and indirect contributions, as well as by skilled and unskilled labour. This measures the total amount of wages supported by the ten largest export sectors, including wages directly paid to workers in the exporting sector, as well as those wages paid indirectly to workers which provide inputs to the particular exporting sector.

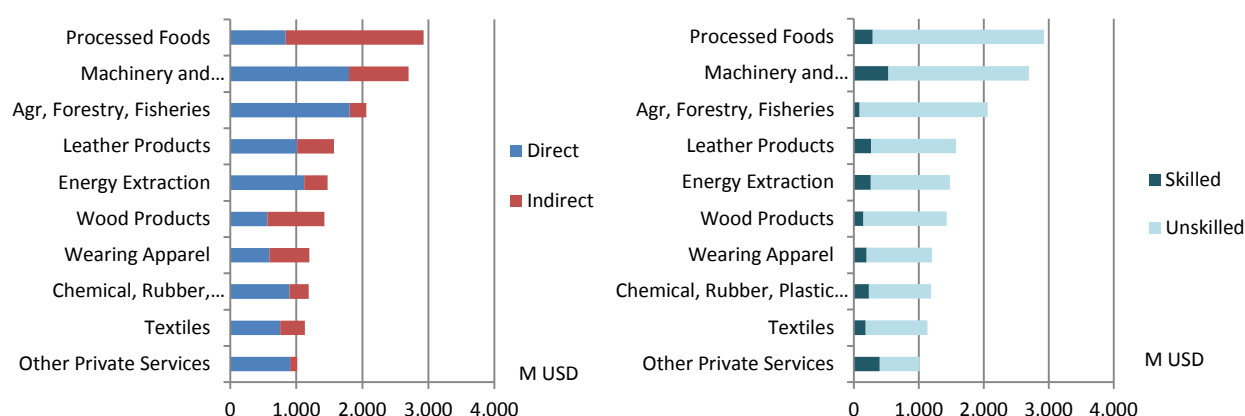
In Cambodia, exports from apparel, textiles, leather products and processed food sectors generate a significant amount of labour income in supplier sectors. However, most value added of these exports accrues to unskilled labour (figure 47). In Viet Nam, exports from the processed foods sector generate the largest indirect labour value added in its supplier industries, followed by the machinery and equipment, wood products and apparel sectors (figure 48). While most labour value added comes from unskilled labour, skilled labour also produces considerable value added from in each of the ten largest export sectors in Viet Nam. The share of skilled labour in the total labour value added of exports is highest in the other private services sector at 39 per cent, while it accounts for 20 per cent in the machinery and equipment sector, 16 per cent in apparel, and 10 per cent in the processed foods sector.

Figure 47: Cambodia – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



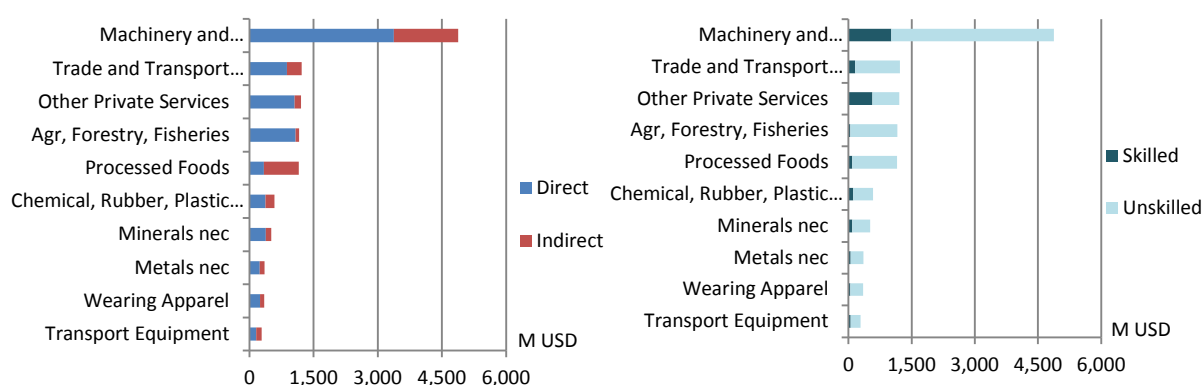
¹⁰ More information on the LACEX database is available at: <https://wits.worldbank.org/analyticaldata/analyticaldata.aspx>. Taken from discussions by Cali et al. (2016) on the basis of a panel of global input-output tables and exports from the World Bank's Global Trade Analysis Project.

Figure 48: Viet Nam – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



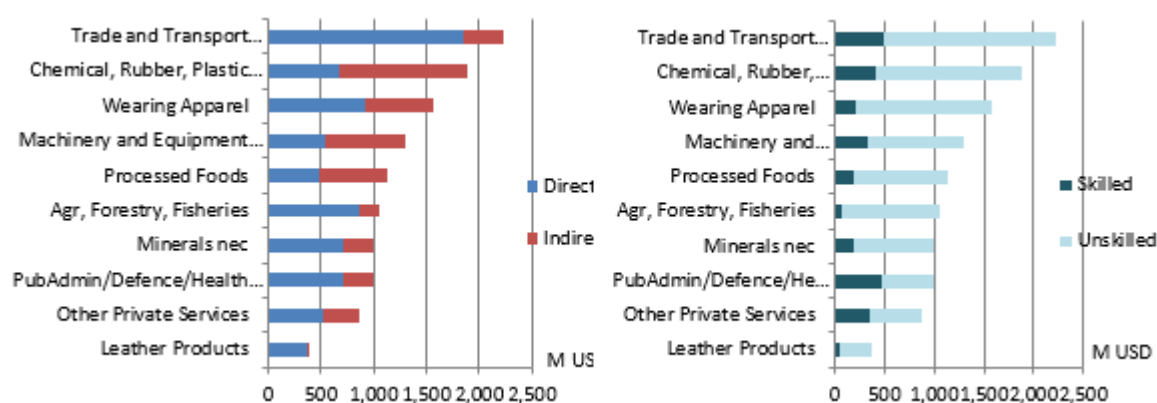
Exports of the machinery and equipment, and processed foods sectors generate the largest amount of labour income in supplier sectors in the Philippines (figure 49). The proportion of skilled wages is highest in the machinery and equipment, other private services and trade and transport sectors, while exports seem to use mostly unskilled labour in the other sectors.

Figure 49: The Philippines – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



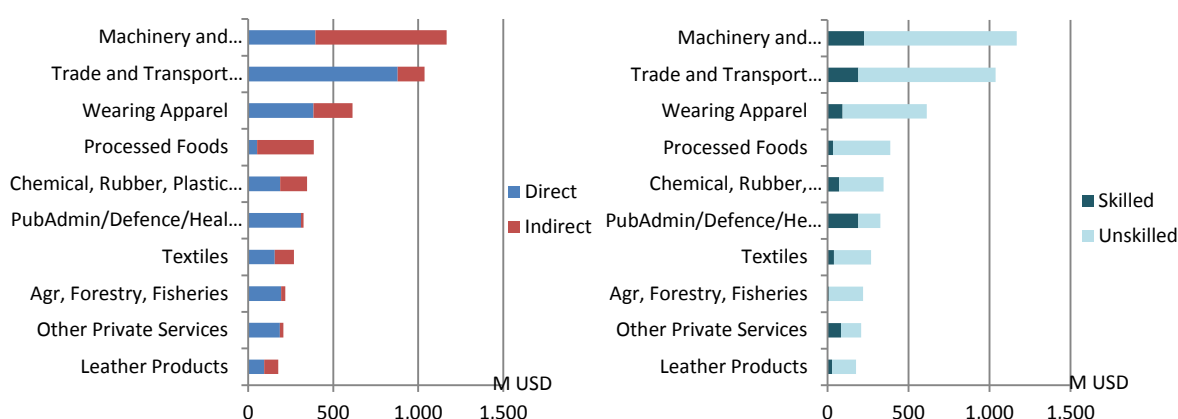
The key exporting sectors have established broad linkages with their supplier industries in Morocco, and nine out of the ten largest labour value added export sectors generate significant labour activity in their supplier sectors (figure 50). The contribution of skilled labour is considerable across the key export sectors, with the exception of agriculture and leather products.

Figure 50: Morocco – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



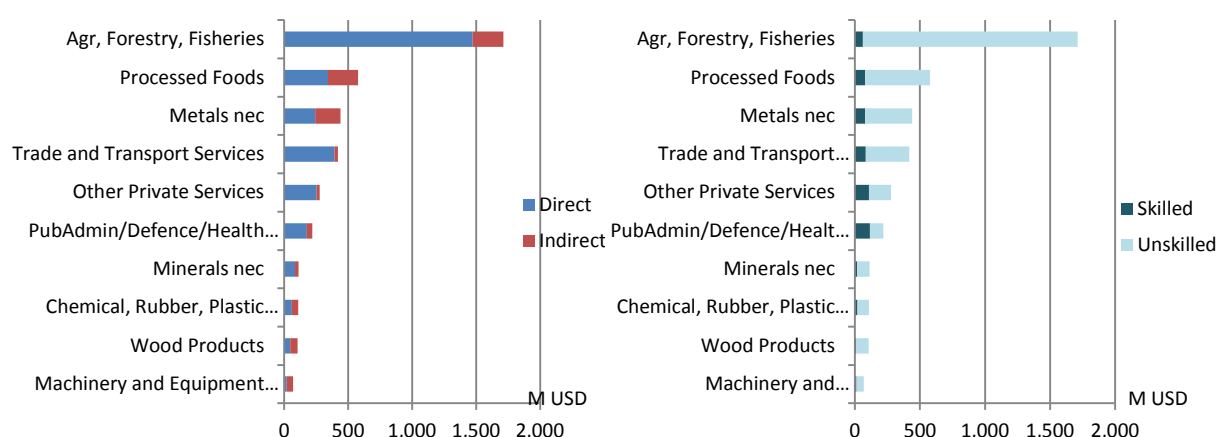
Exporting sectors also play an important role in generating labour income in their supplier sectors in Tunisia (figure 51). Exports of the machinery and equipment, and the processed foods sectors in particular generate more labour income in the supplier industries than in their respective sectors of production. The capacity of key exports to generate skilled wages is more limited, and primarily concentrated in the public administration, defence, health and education, machinery and equipment, and trade and transport sectors.

Figure 51: Tunisia – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



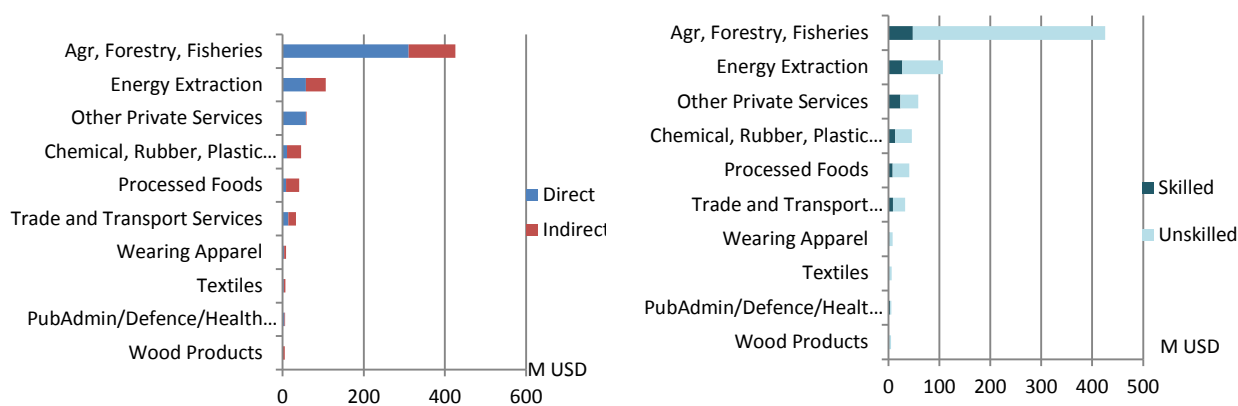
In Ghana, exports of agriculture, processed food and metals generate significant wages in their supplier industries (figure 52). Exports mostly support unskilled wages and employment, with the exception of the public administration, defence, health and education, other private services sectors, and metals and processed foods.

Figure 52: Ghana – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



In Malawi agriculture, energy, other private services, plastics, processed foods, and trade and transport generate exports with sizeable labour value added (figure 53). Although these exports are modest in nominal terms, the importance of these exports in supporting wages and employment across the economy is high, as with the exception of other private services, they generate substantial wages in their supplier sectors. Around 80 per cent of the wages generated through the exports of processed foods is accrued in sectors which provide inputs for the processed food sector. The share of indirect contribution to total labour value added is 76 per cent in the plastics and chemicals sector, 56 per cent in trade and transport, 46 per cent in energy, and 27 per cent in agriculture. These exports mostly support unskilled wages, with the proportion of skilled wages of total labour value added ranging from 40 per cent in other private services to 11 per cent in agriculture.

Figure 53: Malawi – Direct and indirect labour value added of exports, backward linkages, and skilled and unskilled total labour value added in exports



4.4. Government agenda for growth through trade

Governments of the countries examined have expressed commitment for furthering integration to the global economy, increasing trade and exports, and attracting foreign companies. Recognizing the role trade can play in the strategic development of their economies, governments identified priority sectors which have the largest potential to generate growth and employment through trade. Creating a large number of decent job opportunities is a key priority in these countries as they face a number of labour market challenges. This includes large numbers of youths entering the labour market every year, high informal employment, and high unemployment rates, especially among youth and higher educated workers.

Cambodia's trade strategy focuses on moving from exporting relatively cheap, labour-intensive and unprocessed agricultural goods to more diversified export products and markets. A number of high-level initiatives have outlined measures to achieve these goals, including Cambodia's first Diagnostic Trade Integration Strategy in 2001, the National Export Strategy: 2006–2008, and the second and third Cambodia Trade Integration Strategies in 2007 and 2014. These strategies announced steps for strengthening the competitiveness of the garment and tourism sectors, and identified priority products, services and sectors that can drive the diversification of the country's export basket. These include the garment, footwear, light manufacturing, processed food, fisheries, milled rice, cassava, high-value silk, and tourism priority sectors, which are expected to drive the diversification of exports and to improve the country's export performance in the near future.

Viet Nam's Exports and Imports Strategy for 2011–2020 aims to shift the export structure of the country so that it supports the industrialization and modernization of the domestic economy. This should be achieved through increasing the export share of high value-added exports, well-processed products, high-technology products and environmentally-friendly products. The strategy identified textiles and garments, footwear, handicrafts, processed foodstuffs, wood products, consumer chemicals, electrical and mechanical products, plastics, construction materials, and electronics sectors as having the highest potential for export growth.

The Philippine Government launched a number of strategic initiatives to support decent job-rich growth. The Philippine Development Plan 2011–2016 identified tourism, BPO, mining, housing, agribusiness, logistics, shipbuilding, and infrastructure as the key sectors that can generate jobs and increase productivity. The plan also identified priority products, including home-style products (furniture and furnishings, home decor, housewares and woodcraft), garments, motor vehicle parts and components, and construction and related materials as having high job growth potential (Philippine Department of Labour and Employment, 2011). To support the creation of higher value-added and high-skill jobs, the Philippine Export Development Plan 2014–2016 provides detailed strategies to implement the Moving Up the Value Chain to Double Exports initiative. The Philippine Labour and Employment Plan 2011–16 outlines strategic responses for generating 1 million local jobs per year, largely in the industry and services sectors *ibid.*). The National Technical Education and Skills Development Plan 2011–16 has been developed in line with these strategies to increase the productivity and employability of workers in priority growth areas through providing improved technical and vocational education and training (TVET) (Technical Education and Skills Development Authority, 2011).

The Government of Jordan launched a number of initiatives during the past years to support the structural transformation of the economy, increase productivity and generate job-rich growth. These include the Jordanian National Agenda, the National Employment Strategy, the Employment-Technical Vocational Education and Training Strategy, and the Jordan Poverty Reduction Strategy. The Vision 2025 Blueprint was introduced in 2015, focusing on increasing competitiveness and employment to boost growth and prosperity.

The strategy identified construction, engineering and housing, transportation and logistics, tourism, health care and health, energy and renewable energy, information technology and innovation, agriculture, educational services, and financial services as priority clusters to drive economic growth and job creation. It also announced priority export markets, including the Gulf Cooperation Countries: Egypt, Islamic Republic of Iran, Iraq, Libyan Arab Jamahiriya, Occupied Territories (Palestine), Syrian Arab Republic and Turkey (World Bank, 2015a).

A key objective of Tunisia's National Development Plan 2016–2020 is to facilitate the transition of the economy from a low-cost production based economy to a high value-added economic hub, through diversifying the economy and creating more high value-added jobs. The plan aims to increase the share of sectors with high level technology content to 30 per cent of GDP by 2020, and the value added in exporting sectors to 20 per cent in 2020. A further objective of the plan is to promote human development and social inclusion by improving the quality of the education system and increasing employability.

In Morocco, the government launched a comprehensive programme for industry development through exports. The Pacte National pour l'Emergence Industrielle (PNEI) was first launched in 2005. The PNEI is based on an agreement between the Government and the private sector to generate sustainable industry and job growth in the most competitive sectors of the economy. The strategy proposed doubling export volumes by 2015, and tripling them by 2019, and to generate 220,000 new jobs during this period. The strategy initially identified six priority industries *Métiers mondiaux du Maroc* [Morocco's Global Jobs] with strong growth potential, including aeronautics, offshoring (sub-contracted activities from outside the country), agrifood, textiles, electronics and automobiles. The pharmaceutical and chemical and para-chemical sectors were added to the list in 2013. To attract investment to these priority sectors, various initiatives provide incentives, specific training programmes and industrial parks for the investors.

The Myanmar Government, together with other development agencies, identified priority sectors which have the potential to become the drivers of economic growth and employment creation in the near future. These sectors include agriculture, fishery and forestry, energy and resources (ILO and Asian Development Bank, 2014), manufacturing, and hotels and tourism (Nyo, 2015). Within manufacturing, the food and beverage, mineral-based products, textiles, footwear, furniture, jewellery, toys, and rubber and plastic consumer goods sectors have shown high potential for expansion and generating employment growth (McKinsey Global Institute, 2013). The first National Export Strategy of Myanmar, which was launched in 2015, identified rice, beans, pulses and oils seeds, garments and textiles, tourism, forestry and fishery products, and rubber as products with high export growth potential (Myanmar Government, 2015). To facilitate the development of priority industries, the Government is focussing on improving the quality of management and enabling sectors such as transport and infrastructure.

Ghana's National Export Strategy for the Non-traditional Sector (2012–2016) aims to develop the potential of non-traditional exports to increase their contribution to economic growth, development, job creation, and to support increasing incomes and standards of living. Besides a wide range of products from agriculture and fishery, the strategy identifies wood products, plastic products, natural rubber and rubber products, aluminium products, and creative arts as industries with high export growth potential. The strategy also announced "the next generation export sectors", which have the potential to drive exports and development over the medium term. These sectors include banking, insurance and other financial services, ICT products, light engineering goods, semiconductors, metal fabrication and intermediate metallic products, home appliances, biotechnology, petrochemicals, and agrochemicals.

The expansion and diversification of Malawi's exports are a priority objective in the Malawi Growth and Development Strategy (MGDS) II, the National Export Strategy (NES) and the Economic Recovery Plan (ERP). The NES, in particular, outlined a road map for diversifying the production base and established intergovernmental coordination arrangements to support this. It identified three priority sectors to drive export diversification, including oil seeds, sugar cane products and agro-manufacturing, in addition to the existing export clusters. The NES recognized the importance of an enabling business environment, appropriate institutional support, and the availability of a skilled workforce for the diversification of exports. It also proposed a number of measures to support the development of these areas.

5. Labour market trends

Five countries of the nine examined in this paper are among the most populous countries of the world. With a population of over 103 million in 2016, the Philippines is the twelfth most populous country in the world, while Viet Nam is ranked thirteenth, with a population of nearly 93 million. Myanmar has 51 million (ranked twenty-fifth), Morocco has a population of 34 million (ranked thirty-ninth), and Ghana has a population of 28 million (ranked forty-sixth).

Similar to other developing countries, these countries have growing populations and high shares of youth population (table 4). Between 2000–2016 Jordan's population grew at a fast annual pace, due to the large influx of migrants from its neighbouring countries. In the other countries, natural increase and improving life expectancy have been the main drivers of population growth. The share of young age cohorts is high, with one-in-five to one-in-six people aged 15–24 years old. Due to these demographic trends, the working age population has expanded dynamically in all of the countries examined during the past two decades.

Table 4: Population and labour force growth

Country	Population in 2016 (in millions)	Annual average population growth (%) 2000–2016	Share of youth (15–24) population (%) 2015	Labour force 2015 (in millions)	Labour force growth 2000–2015 (in millions)
Cambodia	15.8	1.7	21	8.6	2.8
Myanmar	52.9	0.9	19	30.5	5.5
Viet Nam	92.7	1.1	17	56.3	13.8
Philippines	103.3	1.8	19	44.3	13.0
Jordan	9.5	3.7	15	2.0	0.7
Morocco	35.3	1.3	18	12.3	2.1
Tunisia	11.4	1.0	16	4.1	0.9
Ghana	28.2	2.5	19	12.9	4.7
Malawi	18.1	2.9	21	7.6	3.0

Source: ILO Key Indicators of the Labour Market (KILM) Database, 2016; and World Bank World Development Indicators Database, 2016a.

The rapid expansion in the working age population did not translate to similar changes in the labour force in all countries, due to significant differences in labour force participation rates (table 5). Labour force participation has been very high in Cambodia, Malawi, Viet Nam and Myanmar. It has increased further during the past 15 years in the three latter countries, while it remained flat in Cambodia. On the other hand, participation has been very low in Jordan, Tunisia and Morocco. This is due to extremely low female workforce participation in these countries, which has improved only marginally in Jordan and Tunisia since 2000, and has decreased further in Morocco. In Morocco and Tunisia only one in four women of working age participate in the labour market; while their share is just over 14 per cent in Jordan. Low female workforce participation in these countries is primarily driven by cultural norms about female roles in society, which also determines the range of jobs perceived suitable for women.

Table 5: Labour force participation rate

Country	Total participation (%)		Female participation (%)	
	2000	2015	2000	2015
Cambodia	81.2	80.9	78.4	75.5
Myanmar	76.9	78.0	74.3	75.1
Viet Nam	77.5	78.3	72.9	73.8
Philippines	65.3	64.7	48.7	50.5
Jordan	41.9	40.0	12.6	14.2
Morocco	53.2	49.2	28.8	25.3
Tunisia	47.4	47.7	23.5	25.1
Ghana	74.7	77.0	72.7	75.5
Malawi	78.5	81.0	76.6	81.2

Source: ILO KILM Database, 2016.

Employment expanded dynamically during the past two decades in most of these countries, while the unemployment rate decreased (table 6).

Table 6: Employment, unemployment and informal employment (%)

Country	Employment change 2000–2015 (in million) ⁸	Total unemployment rate ⁸		Youth unemployment rate ⁸		Informal employment ¹ most recent
		2000	2014	2000	2014	
Cambodia	2.9	2.5	0.4	3.8	0.7	59 ² (2014)
Myanmar	5.5	5.6	4.6	13.3	12.0	73 ³ (2010)
Viet Nam	13.6	2.3	1.9	4.6	5.5	68 ⁴ (2009)
Philippines	13.6	11.2	6.6	23.0	15.4	72 ⁶
Jordan	0.7	13.7	11.9	27.9	31.8	44 (2010) ⁵
Morocco	2.3	13.6	9.9	19.8	19.9	67 ⁶
Tunisia	0.8	15.7	15.3	33.4	35.0	35 ⁶
Ghana	4.7	10.4	5.9	16.3	11.5	84 (2014) ⁹
Malawi	2.8	7.0	6.6	9.2	8.7	89 (2013) ⁷

¹ These are indicative measures of informal employment from various sources. The definition of informal employment varies across the different sources, which results in different measures. Data on the informal economy and informal employment are typically not available on a regular and comparable basis.

² Estimates about informal sector employment in Cambodia are not directly available. This shows the proportion of vulnerable workers (own-account workers, self-employed, and unpaid family workers).

³ Source: World Bank, 2016a.

⁴ Percentage of informal employment in total non-agricultural employment, ILO KILM Database, 2016.

⁵ Source: UNDP, 2013.

⁶ Source: OECD, 2009.

⁷ Source: Malawi, National Statistical Office, 2014.

⁸ Source: ILO KILM Database, 2016.

⁹ Source: World Bank, 2014b.

There are large differences in unemployment across these countries, ranging from just 0.4 per cent in Cambodia, to over 15 per cent in Tunisia. As large youth cohorts enter the labour markets of these countries every year, the incidence of unemployment tends to be particularly high for youth. While the youth unemployment rate has decreased in most of the countries examined, in line with the aggregate unemployment rate between 2000–2015, it has increased in Jordan and Tunisia. In these countries around one in three workers aged 15–24 do not have a job. In most of these countries the number of jobs generated in the formal

economy was insufficient to absorb the large number of new entrants to the labour market, many of whom became unemployed, or employed in the informal economy. The creation of productive and decent employment opportunities for the large amount of young entrants to the labour market is one of the biggest challenges for the governments of these countries.

Although the official unemployment rate has decreased in all of these countries since 2000, this measure is likely to underestimate the slack labour force in the economy. Informal sector employment is very significant in these countries. A large number of unemployed workers get absorbed into the informal economy and agriculture, working as unpaid family members in the household or own-account employees. These jobs are typically characterised by low wages, poor working conditions and the lack of social protection. Many of these workers are practically unemployed, leading to official statistics underestimating unemployment and overestimating labour force participation rates.

5.1. Changes in the structure of employment¹¹

With increasing openness and integration to the global economy, employment typically shifts from low-productivity agriculture to the manufacturing sector, which is characterised by higher productivity and higher wages. With further development, the share of services grows as employment shifts from manufacturing and agriculture to higher productivity services. The employment share of agriculture decreased significantly in most of the countries, including Cambodia, Viet Nam, the Philippines, Ghana, Morocco and Tunisia (figure 54).¹² It also decreased in Jordan, where agriculture traditionally plays a minimal role in production and employment. In line with the expansion of the labour force, the number of people employed in industry increased in all of the countries. Significant gains in the share of industrial employment took place in Cambodia, Viet Nam and Tunisia. The services sector has become the largest employer in Viet Nam, the Philippines, Jordan, Morocco and Tunisia. However, high share of employment in services might not always signal high levels of development, because it also covers informal sector employment in trade and repair services.

¹¹ Data on the structure of employment has not been collected and published on a systematic and regular basis in most of these countries. Hence, the analysis in this section is based on various data sources, including national labour force and social surveys, one-off reports by development agencies and the ILO KILM database. The data cover different categories, classifications and time periods across the countries, and they are not always comparable across countries.

¹² For Malawi, labour force survey data is only available for 2013, and it does not provide information on longer term trends in the structure of employment.

Figure 54: Employment by primary sectors (%)



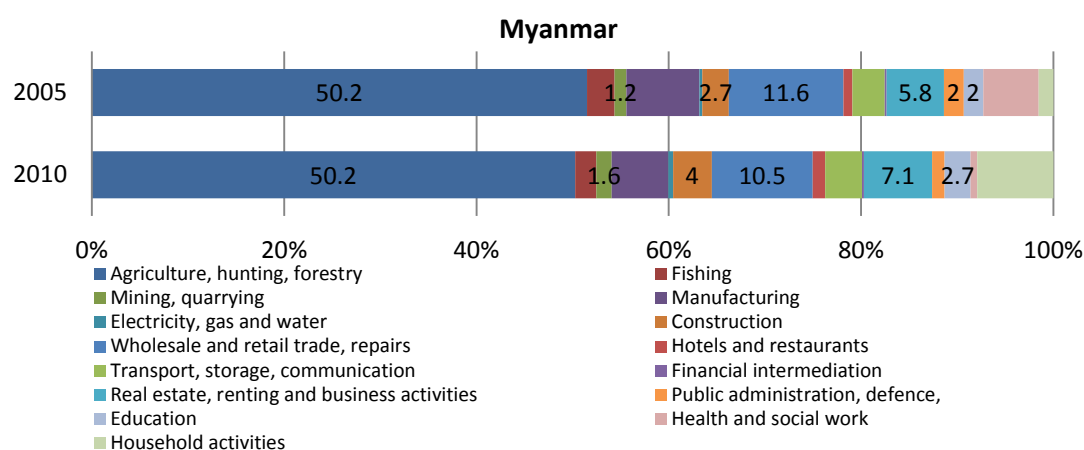
Note: Industry includes construction, energy and utilities besides manufacturing.

Source: ILO KILM, 2016; Jordan, Department of Statistics 2015; Cambodia, National Institute of Statistics, 2014.

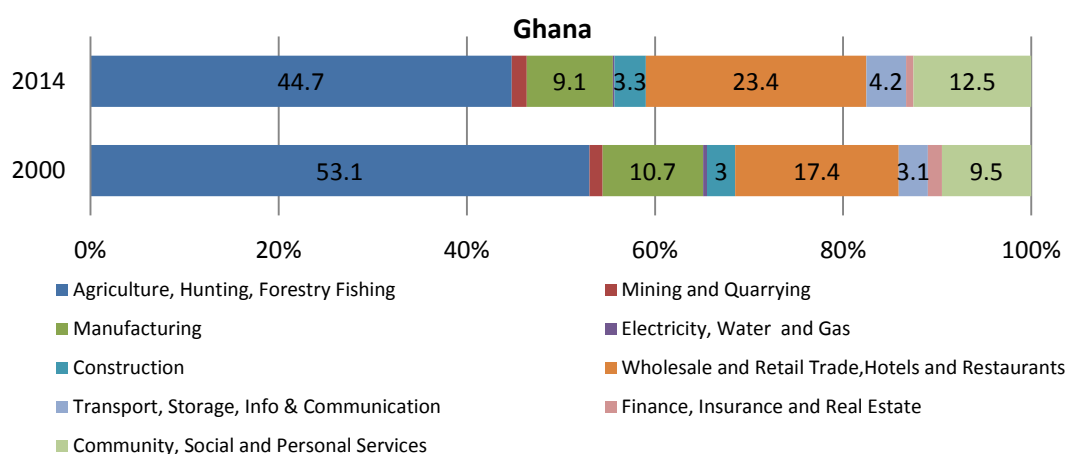
These trends in sectoral employment also suggest that, in some countries like Ghana, Malawi and Myanmar, the shift of the workforce out of agriculture to manufacturing has not been significant. Although the employment share of agriculture, hunting and forestry decreased, in Ghana and Myanmar it remains the biggest employer in these countries, as every second person still works in agriculture. In Myanmar, the employment share of manufacturing decreased from 11 per cent in 1990 to below 6 per cent in 2010. Low-end service sectors make up the remainder of employment, including trade and repairs (10.5 per cent), miscellaneous production activities of private households (7.9 per cent) and renting and business activities (7.1 per cent) (Myanmar Government, 2011). Most of this employment is in the informal economy. Ghana's employment structure developed along similar trends during the past two decades. Services related to the informal sector such as retail activities, construction, and transport expanded the most dynamically, but also in some high value-added services such as finance and insurance, ICT, and real estate. A third area of services growth included public services, such as education and health care, and public administration (World Bank, 2014b).

In Malawi, an estimated two out of three people work in agriculture, mainly as smallholder subsistence farmers. The productivity of the sector is low, due to the small scale of land holdings, the lack of know-how and capital investment. Most farmers have no education, and do not possess the basic foundation, technical or entrepreneurial skills that would enable them to increase productivity (World Bank, 2014d). The share of manufacturing employment is only around 4 per cent. Employment in the services sector accounted for around 30 per cent of the total, largely driven by informal sector employment, including retail and wholesale trade, which is the second largest employer in the economy. Increasing activity in some higher value-added sectors, such as telecommunications and financial services, might have also contributed to employment in the services sector (ibid.).

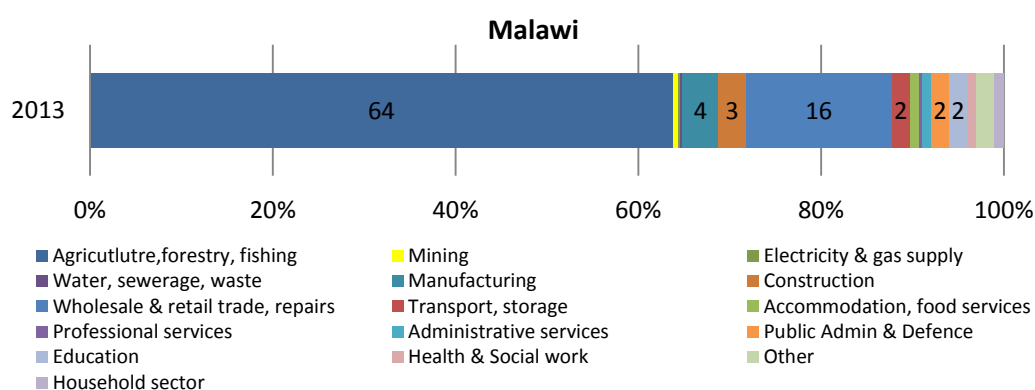
Figure 55: Employment by economic activity (%)



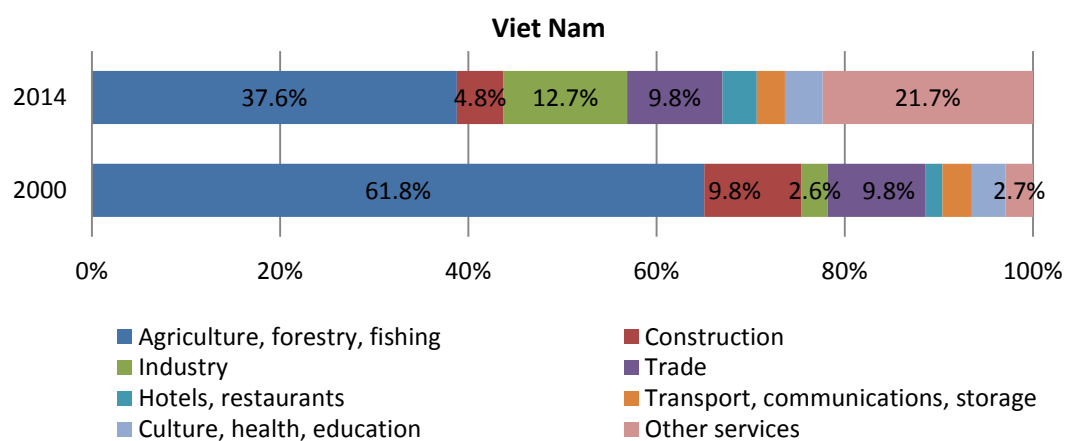
Source: Myanmar Government, 2011.



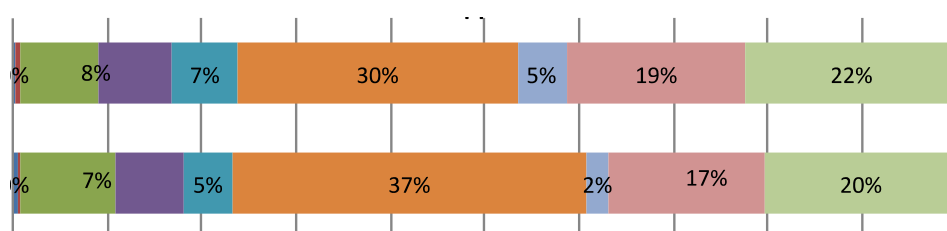
Source: Ghana Statistical Service, 2005 and 2014.



Source: Malawi National Statistical Office, Malawi Labour Force Survey, 2014.

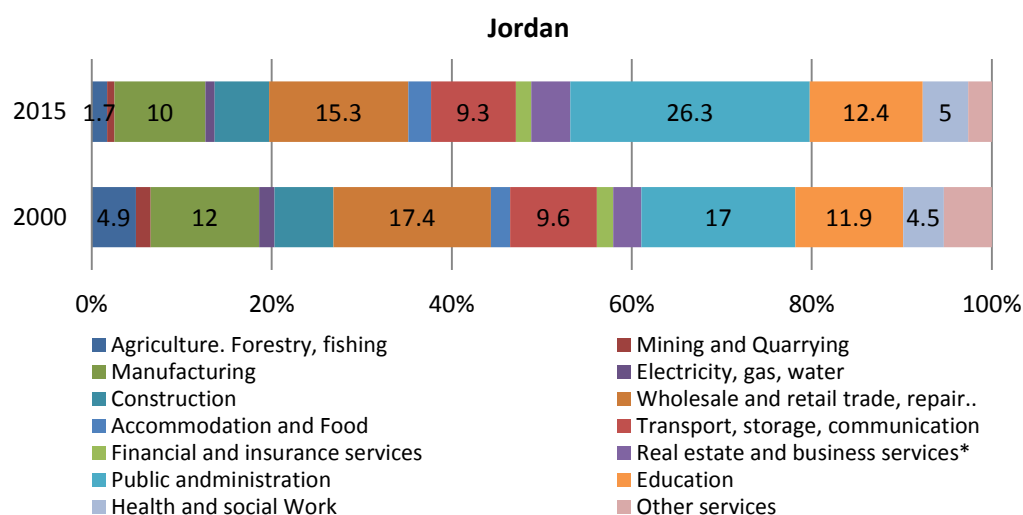


Source: Viet Nam, Government Statistics Office, 2005 and 2014.

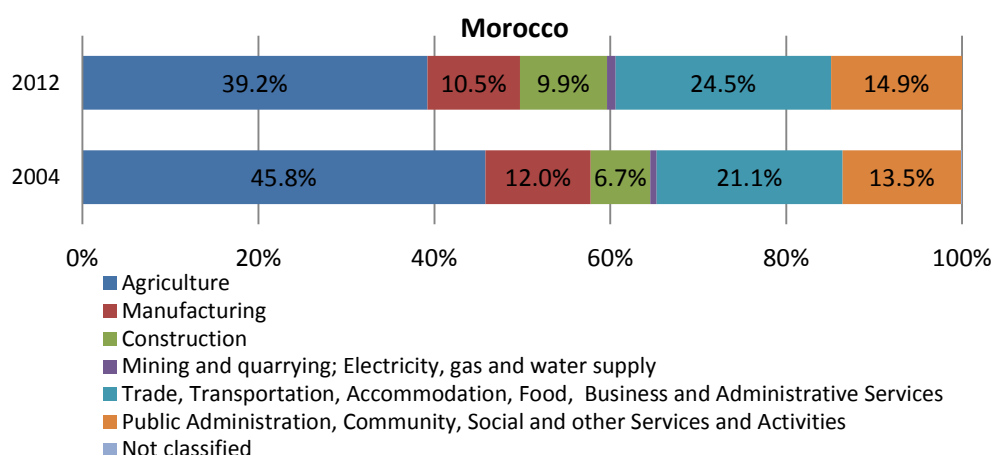


e; repair of motor vehicles and motorcycles

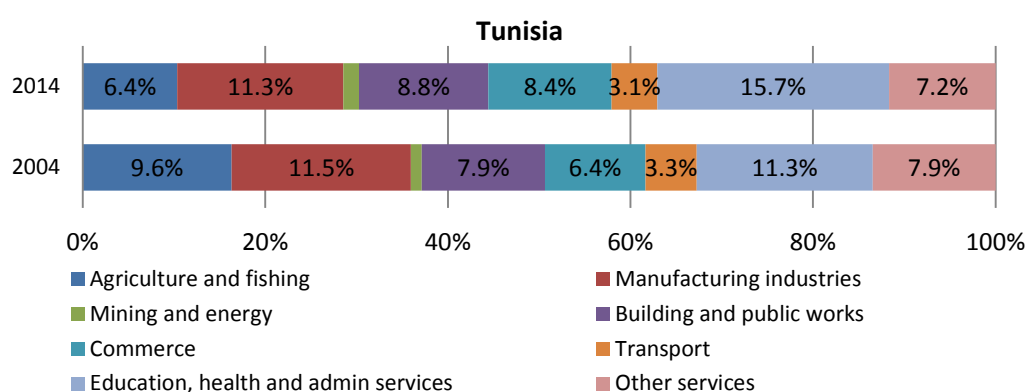
Source: Philippine Statistics Authority, 2000 and 2015.



Source: Jordan Department of Statistics, 2000 and 2015.



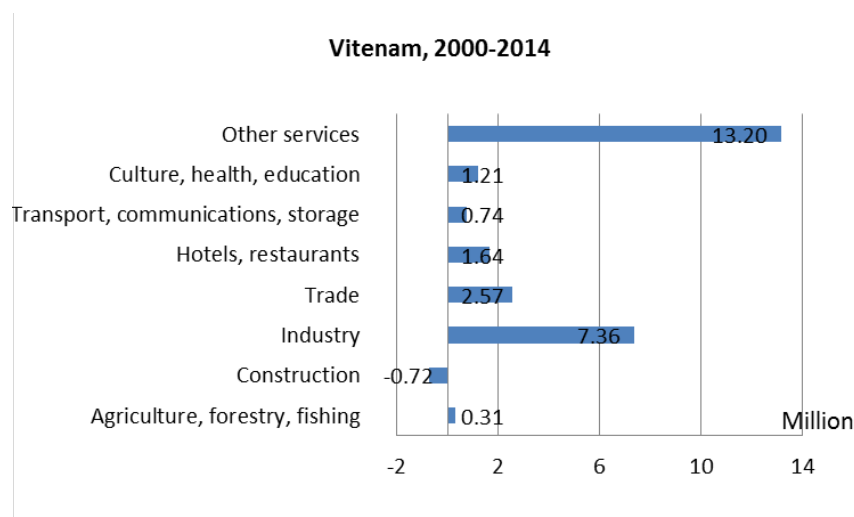
Source: ILO KILM Database, 2016.



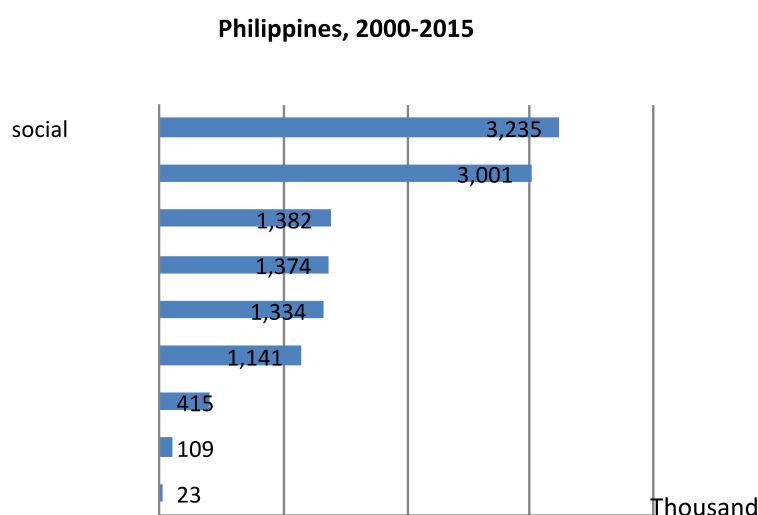
Source: ILO KILM Database, 2016.

On the other hand, the transition of employment from low to higher productivity sectors has been fast in some of the ASEAN economies. Estimates suggest that in Viet Nam over 1 million workers move from agriculture to industry and services every year, as these sectors have generated the most new jobs during the past two decades (Asian Development Bank, 2014). In 2014, manufacturing alone represented around 14 per cent of employment, and the apparel industry accounted for around one-third of this share. The employment shares of industries higher up the value-added chain were smaller. Trade sub-sectors and other services experienced the largest gains in employment, which suggests that a large number of these jobs were in the informal economy.

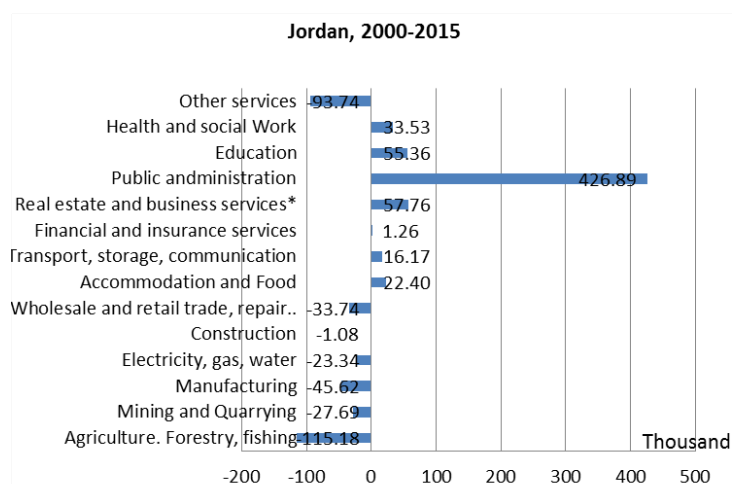
Figure 56: Employment change by economic activity



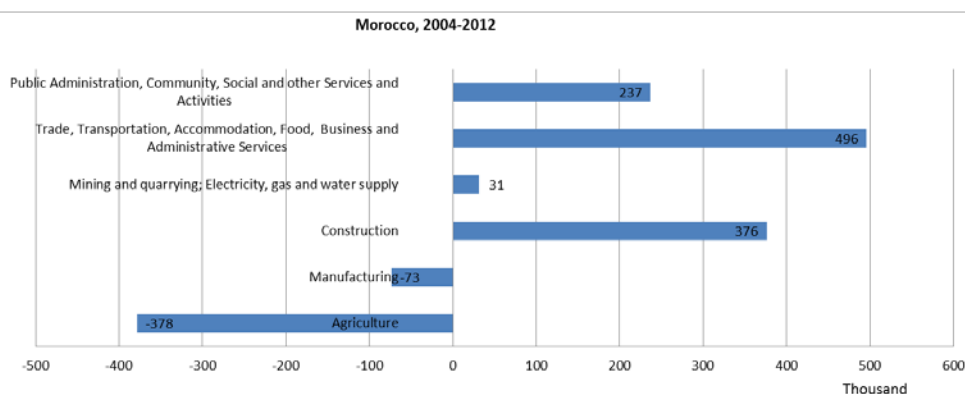
Source: Viet Nam, Government Statistics Office, 2005 and 2014.



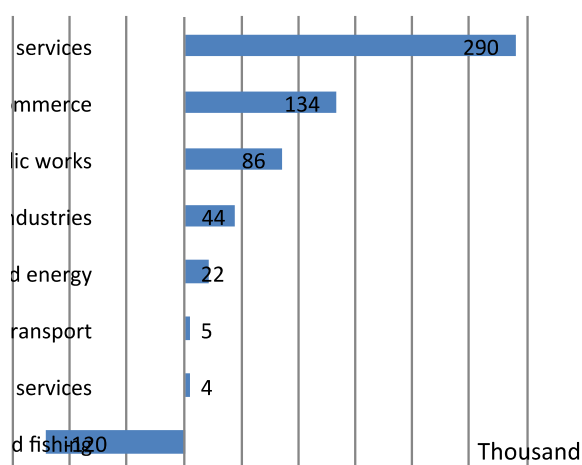
Source: Philippine Statistics Authority, 2000 and 2015.



Source: Jordan Department of Statistics, 2000 and 2015.



Source: ILO KILM Database, 2016.



Source: Tunisia, Institut National de la Statistique, 2015.

In the Philippines, the services sector generated the most new jobs during the past 15 years, much of this growth supported formal employment. The largest employment gain occurred in the community, social and personal services sub-sectors, including hotels and restaurants, where the number of employees grew by over 3.2 million during the past 15 years. Employment in finance, real estate, business and administrative services has more than tripled during this period. The BPO sector has become a key driver and employer of the Philippine economy, and the number of employees in administrative and support services reached nearly 1.2 million in 2015, or 2.9 per cent of total employment. While the employment share of the manufacturing industry remained flat in this period, the number of workers in manufacturing reached around 3.2 million, the majority of which (over 2 million) were employed in the electronics industry (SEIPI, 2016).

The transition of employment in the MENA countries has been slow and more moderate. In Jordan, the services sector has been the largest employer, with a relatively high share of formal employment due to the dominance of public sector employment. During the past 15 years, job creation was driven primarily by the public sector, followed by real estate, education, health and social services, and food and accommodation. The real estate and food and accommodation sectors are dominated by micro-firms in Jordan, which often operate in the informal economy. Some high productivity sectors, including chemicals, pharmaceuticals, the food sector and finance, also contributed to job creation. Between 2006–2011 these sectors accounted for 28 percent of total net job creation (ECORYS, 2014).

In Morocco, the shift has also been slow and at a moderate scale. Between 1999 and 2014, two out of three new jobs were created in the services sector (87,000 jobs per year), while one in four were in construction (31,000 jobs per year), 8 per cent (10,000 jobs per year) in agriculture, forestry and fishing, while only 1 per cent (1,000 jobs per year) was in manufacturing (Morocco. Haut Commissariat Au Plan, 2015). Within services, the largest gains occurred in retail trade and repair of household goods, and personal services sectors, which are typically sources of informal employment. However, employment in tourism, BPO and information technology has also increased. By 2010, employment in tourism increased to 450,000, making it the second largest employer after agriculture. While the overall employment share of manufacturing did not change, employment shifted between the various manufacturing industries. Traditional industries, such as textiles, knitwear and clothing lost employment, while new industries emerged, including automotive and aeronautics. Morocco's aeronautics industry started up a decade ago. By 2014, it had around 100 companies, including key transnational companies like Bombardier, EADS, Safran, Aerospace and Aircelle, which employed over 100,000 skilled workers (Mansour and Castel, 2014).

Tunisia has a similar share of manufacturing sector employment, with the number of manufacturing workers increasing during the past 15 years. While employment expanded in each of the key exporting industries between 2000–2013, it grew most dynamically in textiles and clothing; food and beverages; fabricated information technology, optical, electronic and electric product manufacturing; automobiles and transport materials sectors (Chebbi, 2015). Within services, employment in the education, health and administrative services sub-sectors showed the biggest growth, followed by commerce. Between 1994–2014, employment more than doubled in these service sub-sectors (Tunisia. Institut National de la Statistique, 2015).

5.2. Employment by occupation, and level of attainment¹³

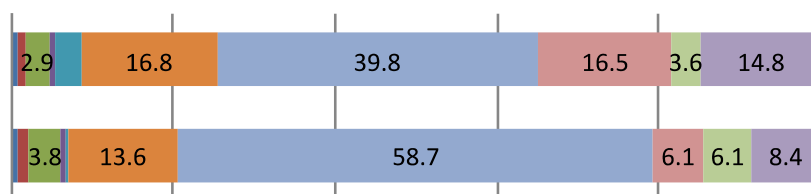
The sectoral shifts described above entailed corresponding changes in the composition of employment by main occupational groups. Given the high importance of agricultural employment across most of the countries, the largest numbers were found in skilled agricultural, forestry and fishery, although their proportion in overall employment has decreased rapidly during the past decade. Due to the large share of informal employment across these countries, the employment of service and sales workers is substantial. Overall, the employment share of high-skill occupations remains low in most of the countries examined.

Due to increasing employment in manufacturing, the employment of craft and related workers increased rapidly in the ASEAN countries. In Cambodia, this group recorded the largest gain between 2004–2013, followed by elementary occupations. These probably represent employment gains in low-skill manufacturing. Most workers are employed as skilled agricultural workers in Cambodia, followed by service and sales workers. The proportion of occupations with high skill levels, including technicians and associated professionals and managers, has remained low at around 5 per cent (figure 57). In Viet Nam, most jobs are in elementary occupations, and service and sales. These two unskilled or low-skilled occupational groups are responsible for over half of total employment. Around a third of employees work in medium-skilled occupations, including machine operators, craft workers and skilled agriculture workers. Highly skilled occupations, including managers, professionals and technicians, make up less than 10 per cent of employment (figure 58). The

¹³ Comparable and coherent data about employment by occupation and attainment level is not available for most of the examined countries.

Philippines occupational structure has evolved differently (figure 59). Labourers and unskilled workers have become the largest occupational group during the past decade, accounting for over 12.5 million, or nearly one in three workers in 2015, increasing their employment share significantly during the past decades. On the other hand, the proportion of occupational groups which are normally associated with higher skill levels has also increased. Around 16 per cent of workers (over 6.2 million) were employed as managerial workers in 2015, up from 10 per cent (around 2.9 million) in 2001. In the same period, the employment share of professionals and para-professionals increased slightly from 2 million in 2001 to 3.1 million in 2015.

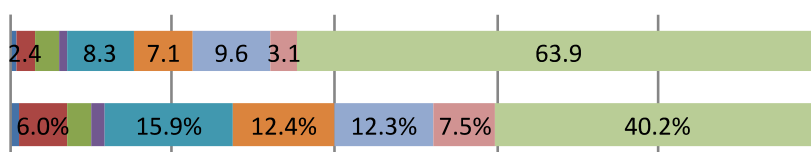
Figure 57: Cambodia – Employment by occupational groups (%)



occupations

Source: Cambodia, National Institute of Statistics, 2013 and 2014.

Figure 58: Viet Nam – Employment by occupational groups (%)



tions

Source: ILO KILM database, 2016.

Figure 59: The Philippines – Employment by occupational groups (%)

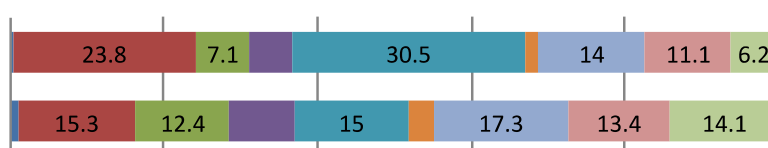


nd unskilled workers

Source: Philippine Statistics Authority, 2000 and 2015.

Among the MENA countries, the evolution of Jordan's occupational employment structure shows a different trend (figure 60). It is fairly balanced across high, medium and low skill-intensive occupations, due to the low share of agricultural employment, and the fairly high share of manufacturing and formal employment. The proportion of managers, professionals and associated professionals has increased moderately between 2000–2015, to around 31 per cent of total employment. In this group the employment of professionals showed the most growth, and in 2015 nearly one in four Jordanian workers were employed as professionals. The employment of service and sales workers has doubled during this period, to over 30 per cent by 2015. At the same time, employment decreased in the lower-skill occupations. The proportion of highly skilled occupations is over 20 per cent in Tunisia (figure 62).

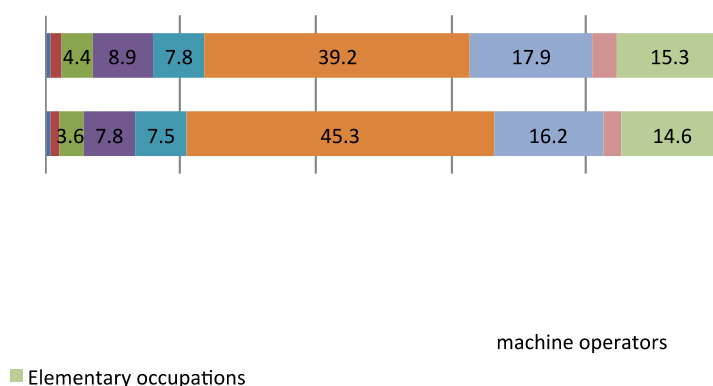
Figure 60: Jordan – Employment by occupational groups (%)



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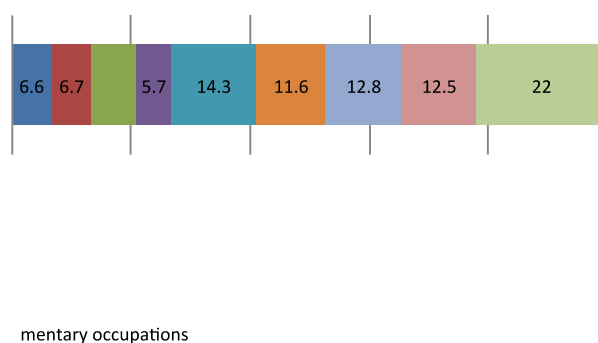
Source: Jordan Department of Statistics, 2000 and 2015.

Figure 61: Morocco – Employment by occupational groups (%)



Source: ILO KILM database, 2016.

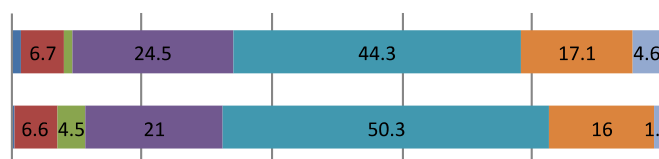
Figure 62: Tunisia – Employment by occupational groups (%)



Source: ILO KILM database, 2016.

The occupational structure in Ghana and Malawi show a similar pattern (Figures 63 and 64). Nearly half of the workers in Malawi and Ghana work as skilled workers in agriculture, and around one-quarter work as sales and service workers, most likely in informal employment. In Malawi, elementary occupations account for around one-fifth of employment. The proportion of employees in occupations which require high skill levels, including managerial, professional and technical positions, is low in both countries, at just 4 per cent in Malawi in 2013, and 8 per cent in Ghana in 2014.

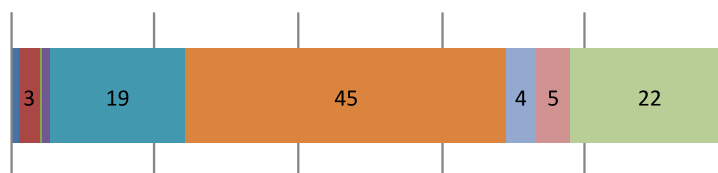
Figure 63: Ghana – Employment by occupational groups (%)



and other occupations

Source: Ghana Statistical Service, 2005 and 2014.

Figure 64: Malawi – Employment by occupational groups (%)

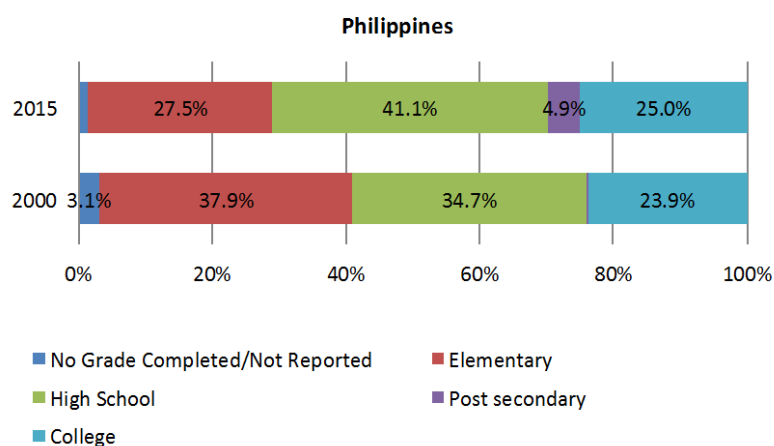


& Machine Operators
Elementary occupations

Source: Malawi National Statistical Office, 2014.

The level of educational attainment of the workforce varies significantly across the countries, in line with the level of development, and the structure of production and trade. During the past two decades, the level of educational attainment increased in all of the countries. Among these countries, Jordan, the Philippines and Tunisia have the most highly educated workforce. Employment in the Philippines has moved towards higher level skills over the past decade, particularly in the technology and export-intensive industries (World Bank, 2010) (figure 65). The move towards higher level skills has been primarily driven by the services sector, where exporting companies have been hiring an increasing number of employees with tertiary qualifications. This is probably reflective of the high academic requirements in BPO. Skills upgrading in the manufacturing sector has been focusing mainly on intermediate level skills.

Figure 65: The Philippines – Employment by level of education (%)

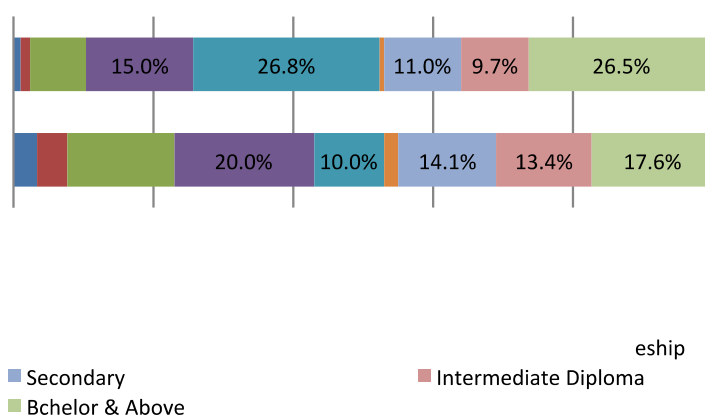


Note: The chart is based on data for October 2000 and 2015. The definition of qualifications does not fully correspond across the two years.

Source: Philippine Statistics Authority, 2000 and 2015.

In Jordan, over one in four workers have completed university, and only around 2.5 per cent of workers have not completed at least elementary studies in 2015 (figure 66).

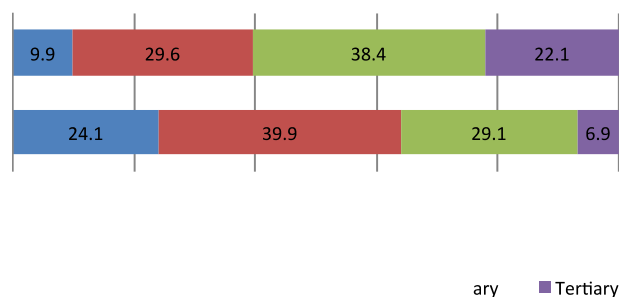
Figure 66: Jordan – Employment by level of education (%)



Source: Jordan Department of Statistics, 2000 and 2015.

In Tunisia, the proportion of workers with tertiary education reached 22 per cent in 2014, up from 7 per cent in 1994 (figure 67). This corresponds to an increase of around 580,000 in the number of people with tertiary education in the labour force (ILO KILM, 2016). These qualifications do not match the type of skills needed on the labour market, partly due to issues around training quality, leading to significant unemployment among university graduates.

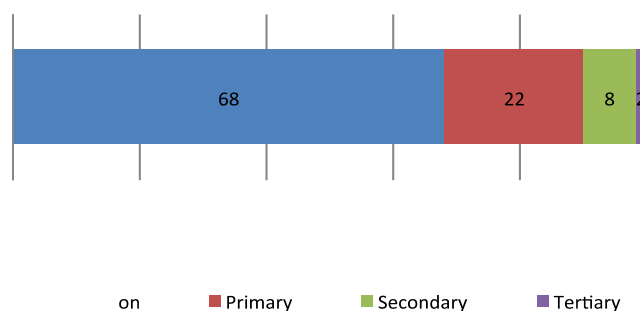
Figure 67: Tunisia – Employment by level of education (%)



Source: Tunisia, Institut National de la Statistique, 2015.

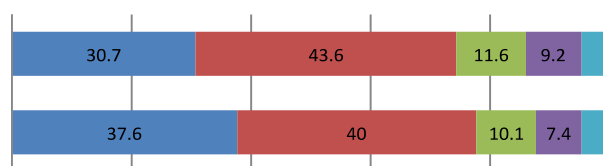
Malawi has the least educated workforce among these countries, where two out of three workers has not completed any education (figure 68). This corresponds to high rates of illiteracy – in 2010, only 61 per cent of the adult population were literate. Figures 69 to 72 show the data for the remaining countries. Adult literacy is also low in Morocco (67 per cent in 2011), Ghana (71 per cent in 2011), and Cambodia (74 per cent in 2009) (World Bank, 2016a). However, despite low literacy levels in Cambodia, around 20 per cent of Cambodian workers have completed at least lower secondary school in 2013. The basic education level of the workforce in Viet Nam is relatively high, and 20 per cent of workers have professional and technical qualifications. These trends correspond to the dominance of low-skill intensive manufacturing in these countries.

Figure 68: Malawi – Employment by level of education (%)



Source: Malawi National Statistical Office, Malawi Labour Force Survey, 2014.

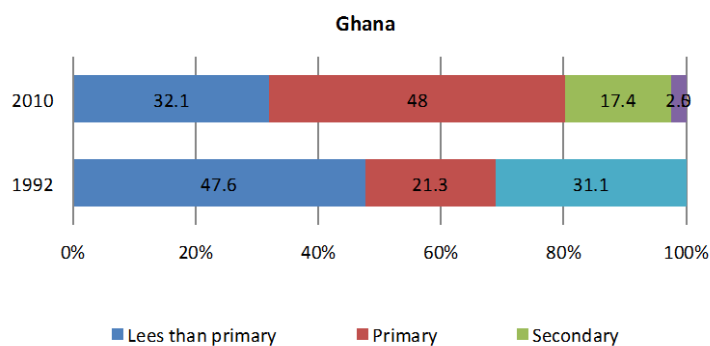
Figure 69: Morocco – Employment by level of education (%)



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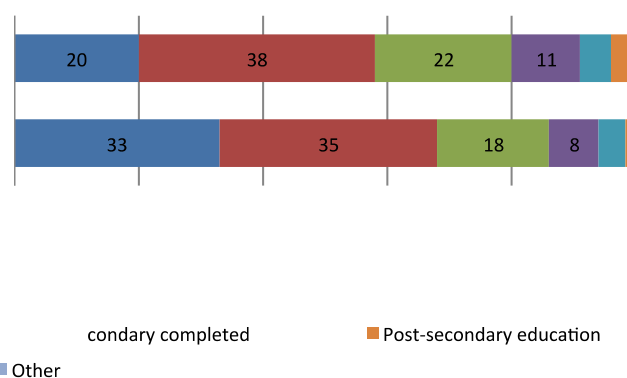
Source: ILO KILM database, 2016.

Figure 70: Ghana – Employment by level of education (%)



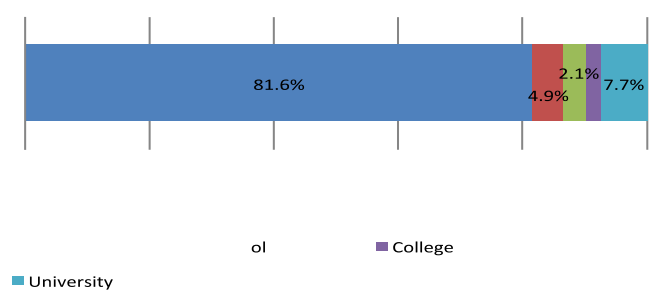
Source: ILO KILM database, 2016.

Figure 71: Cambodia – Employment by level of education (%)



Source: Cambodia National Institute of Statistics, 2014.

Figure 72: Viet Nam – Employment by level of education (%)



Note: Data for Viet Nam relates to the attainment of professional and technical qualifications, rather than general education.
Source: Viet Nam General Statistics Office, 2014.

6. The skills challenge

Although both the number of jobs and the labour force grew in the examined countries during the past two decades, the quality and quantity of workforce skills were often inadequate to meet the requirements of the jobs created. Table 7 presents selected indicators which show the potential extent, severity and type of mismatch between workforce skills and labour market needs. The first two indicators are based on surveys which measure the extent to which enterprises perceive the availability of appropriately skilled workers is an issue. The third indicator shows what proportion of workers with primary, secondary and tertiary education are unemployed. The last column shows the most prevalent type of skill mismatch in the country – although normally different types of mismatch exist at the same time.

Table 7: Selected indicators of skills mismatch, and type of prevalent mismatch

Country	WEF Inadequately educated workforce Rank / Score ¹	World Bank Enterprise Survey ² Inadequately educated workforce Rank / %	Unemployment of persons with primary, secondary and tertiary education %	Prevalent skills mismatch ³
Cambodia	2/13.6	3/17.6	n/a	Labour and skill shortages
Myanmar	2/10.8	4/12.4	n/a	Skill shortages
Viet Nam	3/11	3/8.1	1.3/2.9/4.1 (2013)	Labour and skill shortages
Philippines	9/2.4	Not in top 10/10.1	6.4/n.a./9.2 (2012)	Skill gaps
Jordan	2/11.3	5/9.5	11.1/9.7/15.8 (2012)	overeducation
Morocco	4/11.2	2/31.8	6.8/18.1/18.1 (2012)	overeducation
Tunisia	9/5.1	4/29.1	11.4/20.6/29.2 (2011)	overeducation
Ghana	11/2.4	Not in top 10/15.6	5.5/9.1/8.2 (2010)	Limited skill shortages
Malawi	11/3.2	Not in top 10/11.9	n/a	Limited skill shortages

¹ Survey respondents were asked to select the five most problematic factors for doing business in the country from the list of 16 factors, and to rank them between one (most problematic) and five. The first number indicates the rank of inadequately educated workforce according to the 16 problematic factors in the given country – e.g. a lower rank means that the issue is more severe. The score corresponds to the responses weighted according to their rankings, and a higher score means that the issue is more severe. These measures indicate the extent to which an inadequately educated workforce is an issue in one country compared to another.

² The first number shows the rank of inadequately educated workforce according to the list of 16 business environment obstacles in a particular country. The second number shows the percentage of survey respondents who indicated that an inadequately educated workforce was a major issue for their businesses.

³ This is based on the summary of information presented in the individual country reports, from various sources.

Source: World Economic Forum, 2015; World Bank, 2016b; ILO KILM Database, 2016.

Skills mismatch seems to be severe in Cambodia, Myanmar, Viet Nam and Morocco. It appears less severe in Jordan and Tunisia. While in the ASEAN countries high reported mismatch is associated with low unemployment rates, MENA countries report both high mismatch and high unemployment. This might signal a structural mismatch between education outputs and labour market needs in these countries. The unemployment rate is particularly high for workers with tertiary education, mostly in Tunisia, but also in Morocco and Jordan. This reflects that due to traditional preferences students rather choose university education, often in fields for which labour market demand is low. While a large number of university educated workers are available, the established export industries mainly require lower level, technical or trade skills.

In ASEAN economies, demand for both skilled and unskilled labour has been strong. In Cambodia and Viet Nam, labour shortages (inability to find enough workers to apply for specific jobs) are compounded by persistent skill shortages (employees lack occupational and soft skills) across a range of key occupations. The shortage of vocational skills seems to be more severe than the shortage of university graduates. The situation is different in the Philippines, where the workforce is highly educated. Workforce skills have been more responsive to the introduction of higher skill-intensive industries, and the rapid expansion of the BPO sector has been able to absorb a large number of tertiary educated workers. However, forecasts suggest that with the progression of integration among the ASEAN countries, trade will intensify in these countries, which would then entail shifts in the demand for skills, and potentially increase skills mismatch. By 2025, more than half of all high-skill employment in Cambodia, the Philippines and Viet Nam could be filled by workers with insufficient qualifications, similar to the situation in Indonesia, the Lao People's Democratic Republic, and Thailand (ILO and Asian Development Bank, 2014). A key source of mismatch is increasing labour migration in Cambodia, Viet Nam, but especially in the Philippines. This will likely intensify skill shortages, particularly in the highly skilled segments of the labour market.

Mismatch appears moderate in the sub-Saharan countries, and likely reflects that both the supply and demand for skilled labour are low. In Malawi, in particular, nearly two-thirds of the population work in subsistence agriculture, and the labour market is small. Companies in both Ghana and Malawi have adapted to the low level of skill supply by operating in a low-skill equilibrium, and using low level technologies. As workers earn low wages, their purchasing power is low, like demand for higher quality, and higher priced products on the domestic market. This means that production is also focused on low price, low quality products and unskilled labour-intensive technologies.

Growth through exports might assist in breaking this cycle, as export markets and multinational chains typically have higher quality requirements and higher prices. The diversification of exports might provide an opportunity to move into the production of higher quality, higher value-added goods and services, which requires a skilled workforce. Opportunities might exist in further processing, and services related to the facilitation of the existing exports, such as transport and logistics, ICT and finance. The exports of plastics, chemicals, metal and metal products are mostly directed towards less demanding regional markets. Joining the supply chains of regional multinationals, and increasing sales to other neighbouring markets could assist in strengthening the industry base and generate employment in these sectors.

7. Conclusion

Although the trade performance of the examined countries improved dynamically during the past two decades, the implications of opening up trade on employment generation and skills demand have been mixed across the countries. The classification of merchandise exports by their skill and technology intensity provides some insight into the employment creation potential of exports and the level of skills for which they generate demand. In Ghana, Malawi and Myanmar exports overwhelmingly consist of non-fuel and primary commodities, which have limited scope for employment creation. Exports in Cambodia mainly include resource and labour-intensive manufacturing, which primarily requires the employment of unskilled labour. In Jordan, Morocco and Tunisia, exports generated substantial demand for medium- and high-skilled labour. In Viet Nam, exports have increasingly been using high-skilled labour, as well as medium- and low-skilled labour. The Philippines export structure reflects advanced manufacturing, with over half of its manufactured exports using high-skilled labour, and another 20 per cent employing medium- and low-skilled labour.

The first stage of the development path involves the export of resources, mining commodities and raw or unprocessed agricultural products. These sectors are normally not labour- or skill-intensive, and increasing exports in these sectors has limited capacity to generate a large number of high value-added employment opportunities. This is characteristic of the sub-Saharan economies, where at the macro level, trade has not generated significant shifts in employment between sectors, occupations or the skill composition of the workforce.

In the next phase, lower skill and technology-intensive manufacturing sectors, such as plastics, textiles, garments, apparel, and processed food are developed, typically through joining the supply networks of multinational companies. Those countries have been able to attract and develop low-skilled labour-intensive manufacturing, where low-skilled labour is abundant, and the attainment of basic skills, primary school attendance and literacy are high. To some extent, this process has taken place in the textile and garment sectors of Myanmar, and on a more significant scale in the textile, garment, and footwear sectors of Viet Nam and Cambodia. In these countries, employment has shifted from agriculture to manufacturing, and the proportion of agricultural workers has declined accordingly.

The following stage in the development path includes the establishment of higher technology and skill-intensive industries, such as more complex electronic and electrical manufacturing, transport equipment (including automobiles and aeronautics parts and components), optical, technical and medical apparatus, and pharmaceuticals. These industries have developed in those countries where a workforce with medium to high skills are available. This characterises the MENA countries, where, besides low-skill textile sector, higher skill-intensive export industries have appeared, including pharmaceuticals in Jordan, aeronautics in Tunisia, and electronic equipment, vehicles and vehicle parts in Morocco. From the ASEAN economies, the Philippines has also reached higher skill-intensive manufacturing, with strong exports in electrical and electronics, machinery, optical, technical and medical apparatus.

Tourism has become an important contributor to service exports and employment in many of the examined countries. Initially, the rise of the tourism sector primarily entailed unskilled and low-skilled employment. The sector has grown and provided stability, safety and basic infrastructure, such as in Viet Nam, Cambodia and Morocco. Higher stages of development involve the development of high skill-intensive service exports, such as BPO and information technology outsourcing. Activities include lower-end centre operations, to higher value-added back office functions (e.g. accounting, claim processing, and software development). These activities have the capacity to generate employment for workers with

higher level tertiary skills. Historic ties and sharing a language and culture also assist in the establishment of these service exports. The BPO sector has become the key driver of the Philippine economy, and also grew in Morocco and Tunisia. This is reflected by increasing employment in the services sector, and in professional and managerial occupations, indicating a large tertiary educated workforce.

The analysis of value-added chains in exporting sectors, based on the World Bank's Export of Value Added Database, suggests that the key exporting sectors in most of these countries have also generated substantial indirect activity in other sectors of the domestic economy. Through providing inputs or services for the production of exports (forward linkages), sectors such as primary agriculture, primary commodities, distribution and trade, transport, business services and information technology have been key enablers of exports in the countries examined. The analysis of backward linkages reveals that the key manufacturing export industries generate substantial activity in their domestic supplier networks, despite often being part of global supply chains. For example, the textile, apparel, machinery and equipment, chemicals, rubber and plastic, and processed food sectors significantly contribute to value added in their supplier sectors.

While generally unskilled labour is responsible for most of the total labour value added in the exporting sectors of these countries, skilled labour is also a key source of labour value added particularly in the machinery and equipment, other private services, and the public administration, health education and defence sectors.

The countries examined have young and growing populations, with large youth cohorts entering the labour market every year. In some of these countries, mainly the MENA countries, unemployment is high, especially for the tertiary educated youth. Generating a large number of formal, decent employment opportunities is a key challenge for the governments of these countries.

Recognising the capacity of trade to generate growth and employment, governments have launched various strategies to support trade and employment creation in priority sectors. In some cases, these primarily focus on diversifying and growing exports through the existing skill base, which attracts similar businesses. In other cases, governments strategically target the development of workforce skills in selected emerging sectors and attract foreign investors. Many of the countries launched comprehensive trade, employment and skills strategies for the effective coordination of development across these areas. However, social and political stability, and government commitment to open up trade to global markets are important prerequisites for improving trade performance.

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