

Report

1 **Strengthening Swiss competitiveness in global value chains**

Nowadays, the economic strength and employment levels of an economy are determined less by what is sold (the final product) than by what is produced (the activities of a company or country). Thanks to global value chains, companies can indeed participate in all or part of the production process of a good or service. The aim is to focus on what the firms do best and to acquire intermediate goods and services elsewhere.

Global value chains incorporate all activities aimed at producing a good or service, from the design stage to the end use, performed by companies either locally or abroad. The production of goods and services became significantly more fragmented along value chains during the second half of the last century. The process became more accentuated in the 1990s, becoming almost systematic with the economic opening of new emerging markets in Asia and Latin America, spearheaded by China, India and Brazil. Technological progress has also driven this trend which has become a global economic phenomenon. The economic and financial crisis of 2009 nevertheless curbed this momentum.

The consequences for the developed economies are significant as global value chains have a fundamental impact on their competitiveness and their trade and investment flows as well as the new means of contributing to international production without any equity participation. At the same time, they offer developing countries new opportunities. This growing interconnection between the economies represents a considerable challenge for government action at national level.

For Switzerland, a country highly integrated in global trade, this new context calls for targeted interventions both via its foreign economic policy and its domestic market policy – the two aspects are equally important for enabling Switzerland to maintain its competitiveness and secure jobs.

1.1 **Global value chains: the challenges of an economic phenomenon**

1.1.1 **Recent developments in international economic relations**

Since 1980, global trade has recorded spectacular growth. The value of global exports of goods has increased from USD 2,030 billion in 1980 to USD 18,800 billion in 2013 representing an average growth of almost 7% per year, which in real terms corresponds to a fourfold increase in the quantities of goods traded. During the same period, the trade in services expanded even more dramatically, recording an average annual

growth of almost 8 %¹. Since 1980, global trade has, on average, increased twice as fast as production². Furthermore, the growth in trade has been accompanied by a significant increase in foreign direct investment (FDI). The total value of FDI flows increased sevenfold between 1990 and 2013³, underscoring the high level of complementarity between investment and trade in terms of economic development. The growth in global trade and investments has nevertheless shrunk since the recession began in 2008. The increase in trade volumes remains globally pegged to the rise in gross domestic product (GDP). Moreover, international production methods without equity participation (as demonstrated by manufacturing subcontracting, service outsourcing, contract farming, franchising, licensing and management contracts) accounted for turnover worth almost USD 2,000 billion in 2009⁴. These contractual relationships offer multinational companies the opportunity to coordinate corporate activities in the host country without holding any equity capital in the companies themselves. These transformations point to a distinct phase of the globalisation process, bringing with it direct consequences for national economic policies.

Numerous factors have contributed to this intensification of the growth in trade. One of the fundamental elements lies in the economic reforms implemented by numerous developing economies at the end of the 1980s and the start of the 1990s as part of their trade policies, as well as their investment and innovation policies. The gradual opening of large markets such as India and China, as well as the liberalisation of certain economies in South East Asia and Latin America, paved the way for a new, global economic environment. These initiatives, often autonomous, were underpinned and amplified by the implementation of rules and commitments made within the framework of the WTO and the international financial system (IMF, OECD) and through free trade agreements. Since then, the average level of tariffs on goods has fallen steadily.

At the same time, technology achieved its own revolution: the development of the Internet and the digital economy profoundly reshaped the global economy. Henceforth, thanks to optical fibre and digital technology, access to information at any point on the planet is almost instantaneous and available at trivial cost. The rapid progress of information and communication technologies has greatly facilitated the movement of goods and services. Finally, new transport techniques (containers, automation) have greatly reduced transaction costs, thereby consolidating the boom in international trade.

Technical progress associated with economic policies encouraging openness to trade has fundamentally redefined the contours of globalisation by incorporating new countries. More particularly, it has altered the very nature of the phenomenon: beyond the purely quantitative aspect, it is the content itself of the trade in goods and services which has changed in recent decades.

Traditionally, trade is founded on the exchange of goods and services between nations: production is no longer intended exclusively for the domestic market as a proportion of it is traded. This was the first wave of globalisation in which international trade involved exporting goods produced within the country (“made-here-

¹ WTO, *World Trade Report*, 2014, p. 24

² WTO, *World Trade Report*, 2013, p. 59

³ UNCTAD, *World Investment Report*, 2014, p. 18

⁴ UNCTAD, *World Investment Report (overview)*, 2011, p. 10

sold-there”)⁵. From 1945, trade typically referred to the trade in final manufactured products and increasingly by the trade in intermediate products. At the same time, the relative share of agriculture in world trade was beginning to fall⁶.

Technological progress and economic liberalisation would give rise to another type of globalisation characterised by the considerable mobility of production factors (labour, capital, technology) and the significant fragmentation of the manufacturing process between the countries (“made-everywhere-sold-there”). This second wave of globalisation also distinguishes itself by the fundamental role played by multinational firms which developed networks of subsidiaries through foreign direct investment. Nowadays, more than two-thirds of global trade is conducted within the multinationals or with their suppliers⁷. This also explains the increase over recent years in the competition to provide a location for attracting multinational companies.

This change in the structure of trade has occurred during the past three decades. More and more often trade is based on the exchange of intermediate goods. As a consequence, countries now increasingly specialise in specific activities and production segments rather than in industrial sectors. World trade is based on a set of activities conducted in different locations around the globe, creating international production networks also referred to as “global value chains”. Encouraging a better understanding of this phenomenon makes it easier to understand current and future trade issues and to identify potential areas for public action.

1.1.2 Impacts of the global value chains on the economy

According to the OECD, a global value chain incorporates all the activities aimed at bringing a product to market, from the design phase to the end use, conducted by companies either locally or abroad⁸. The creation of a product requires a series of tasks ranging from the creation of a new model to services for the end customers, through production, marketing, logistics and distribution. These tasks can be performed by a single company or by several entities in one or more countries. The choice of stakeholders in a value chain provides for an optimum combination in terms of the costs of the different tasks. This enables a company to manufacture its own high technology in a country with lower labour and living costs by delocalising all or part of its production (e.g. assembly) to that country and creating new sales opportunities which did not previously exist in the traditional trade of final goods.

The diagram drawn up by Stan Shih (see figure 1), the founder of the Taiwanese IT products firm Acer, illustrates a product cycle along a global value chain. It clearly shows the different opportunities for creating value upstream and downstream of the purely industrial production and assembly phase. Initially designed to study the case of the electronics industry, the Shih curve – also referred to as the smiling curve – highlights the unequal distribution of the value added of the production activities for a product or industry.

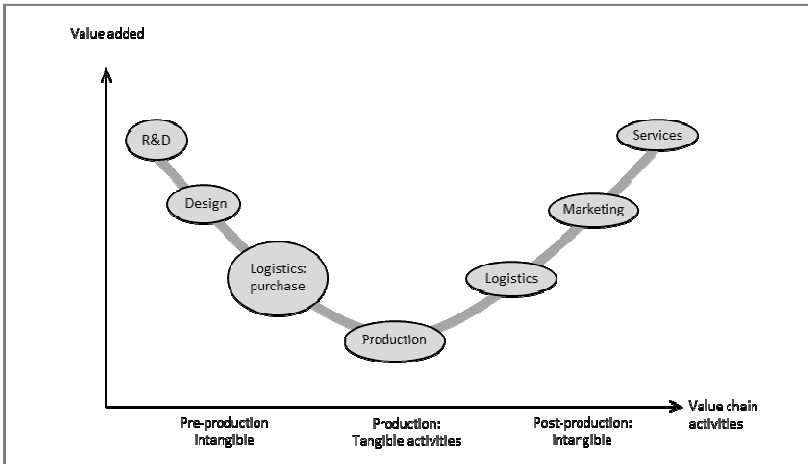
⁵ Baldwin, *Multilateralising 21st Century Regionalism*, 2014, p. 5

⁶ WTO, *World Trade Report*, 2013, p. 56

⁷ WTO, *World Trade Report*, 2013, p. 57

⁸ OECD, *Interconnected economies: benefiting from global value chains*, summary report, 2013, p. 10

The Stan Shih diagram



Source: adapted from Shih, Business Week Online extra, 1992 and OECD, *Interconnected economies: benefiting from global value chains*, 2014, p. 237

From left to right, the curve describes the different activities of a value added chain: research and development (R&D), design, logistics, manufacturing production, distribution, marketing and sales. The positioning of each activity according to its value added content (left-hand scale) clearly shows that the greatest value added lies at the two extremities of the chain, as design, R&D, distribution and sales clearly generate more value than manufacturing work (production, assembly). This diagram is particularly suitable for the electronics, textiles and clothing, shoes and toys sectors. Breaking down the price of a man's suit into the value added per activity shows that for a sale price of USD 400, manufacturing activities account for only 9 % of the total price with the rest solely comprising services⁹. In the heavy equipment sectors (cars, aeronautics, machine tools), the value of assembly represents a higher proportion of the finished product than in the textiles or clothing sectors. The new production schemes based on global value chains profoundly alter the structure of the economy both at company and national level:

- The higher specialisation of companies and countries in specific tasks and functions increases international competition and boosts productivity. Most goods and many services are produced in different locations around the world ("made in the world") according to the particular tasks in which the companies specialise. By purchasing inputs from cheaper and more efficient suppliers both locally and globally, companies can benefit from more advantageous costs. This increasingly intensive international division of tasks offers firms the possibility of benefiting from efficiency gains and economies of scale, thereby improving their productivity. Global value chains primarily affect multinational companies and their subsidiaries, although the latter also

⁹ P. Low, *The Role of Services in Global Value Chains*, 2013, p. 8

call on independent suppliers including small and medium-sized enterprises (SMEs) in certain segments of production. This fragmentation of tasks generates new niches for the supply of goods and services from which SMEs can benefit thanks to their capacity to react and innovate. Studies have shown that in 2010, a standard American multinational purchased 25 % of its inputs from SMEs¹⁰.

The structure of value chains differs according to the type of product. Major international groups producing relatively simple and cheap articles (clothing, toys) will become leaders of the global value chain by focusing on marketing and distribution and by utilising subcontractors for the rest. In activities demonstrating greater technological value added and based on R&D (electronic, chemistry), the firms will attempt to retain control of their supply chain, from the design stage to sales, to avoid competing companies acquiring the technology.

- The global value chains do not seem to have an impact on the total level of employment, although they do alter the composition of the labour market: the relationship between trade and employment has been the subject of numerous studies¹¹ demonstrating that, in general, economic globalisation has had only very little, if any, effect on the overall, global level of employment. This level does not depend solely on the extent of a country's economic liberalisation but on the growth of the labour force and the economic policies relating to the labour market.

In the years leading up to the economic crisis of 2008 unemployment rates fluctuated according to the economic situation of the OECD countries, whereas trade and foreign direct investment became stronger. Global value chains encourage the delocalisation of certain stages of production, in particular those requiring high labour intensity. Any task which can be automated (accounting, monitoring, etc.) runs the risk of being delocalised. Global value chains now influence the composition of the labour market. Adjustments on this market have a variable impact on the different categories of worker. The share of poorly skilled workers has diminished in the industrialised countries and the fall in manufacturing activities has been offset by strong growth of service activities requiring higher qualifications, hence the importance of training and skills in successful reintegration into the labour market.

Global value chains contribute to shifting demand for employees' qualifications but it is difficult to distinguish the changes caused by trade from those caused by technological change. Furthermore, according to a recent OECD study, global wage inequality has been falling due to the development of global value chains¹².

It can be stated in summary that a country's integration into the global value chains is a necessary but not sufficient condition for preserving existing or creating new jobs.

¹⁰ OECD, *Interconnected Economies*, 2013, Summary report, pp. 23-24

¹¹ OECD, *Interconnected Economies*, 2013, pp. 34-35 and ICITE, *Policy Priorities for International Trade and Jobs*, 2012, p. 47

¹² OECD, *Trade, Global Value Chains and Wage-Income Inequalities*, 2015

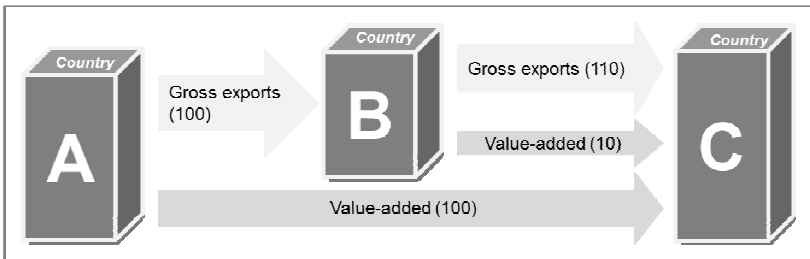
1.1.3 The new measurement of world trade

Today, the major part of world trade consists of inputs, i.e. products which are used to make other products (60 % in the trade in goods and 75 % for the trade in services). In most developed economies, about one-third of imports of intermediate goods are incorporated into national production which is then exported. Traditional trade statistics do not reflect this. They incorrectly assign the total value of traded products to the last country involved in the production process, even if its input is minimal. The decision-making bases of policy makers along with perceptions of public opinion are therefore distorted. It is absurd that the entire production cost of an iPhone assembled in China and sold in the United States is recorded as an American import, thereby increasing the American trade deficit vis-à-vis China. Yet the production cost in China is less than 4 % of the total production cost of the iPhone, with the main suppliers of individual parts and services based in Japan, Germany, South Korea and the United States¹³.

The considerable expansion of global value chains requires a new way of measuring international trade flows in order to obtain a more precise picture of the weighting of the countries in international competition. At the beginning of 2013, the OECD, together with the WTO, developed a methodology allowing trade to be measured in terms of value added for 95 % of the global production of goods and services¹⁴.

Figure 2

Measuring trade in value added



Source: OECD, *Interconnected economies: benefiting from global value chains – Summary report*, 2013

For example (cf. figure 2), country A exports USD 100 of goods produced within its borders to country B which refines them before exporting them to country C, the site of the final consumption. Country B adds USD 10 to the value of these goods and exports USD 110 to country C. According to traditional statistics, the total value of the exports is USD 210 whereas the value added created during the production of these goods is only USD 110. Traditional accounting also shows that country C has a trade deficit of USD 110 with regard to country B and has not traded with country A, whereas country A is the prime beneficiary of country C's consumption.

¹³ Asian Development Bank Institute, *How the iPhone Widens the United States Trade Deficit with the People's Republic of China*, no. 257 2010

¹⁴ OECD, *Global Value Chains: OECD Work on Measuring Trade in Value-Added and Beyond*, 2012

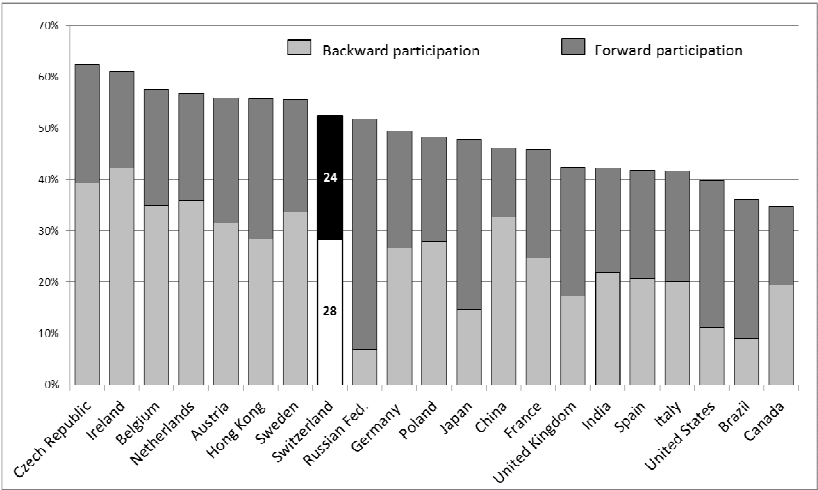
By measuring the additional contributions along the production process, the new calculation method offers a more accurate picture of current economic issues, in particular the share of imports incorporated into the goods exported or the importance of services in the global value chains. It establishes a means of recording the countries' trade balances, more accurately reflecting the role played by the main protagonists of globalisation. So, in 2009, China's trade surplus with the United States falls by one-third if it is measured in terms of value added instead of using traditional statistics. This is due in particular to the fact that the final products assembled in China often contain inputs from the United States. Another example is Switzerland's trade deficit with Germany which is more than halved as the value added content in Swiss exports to Germany is higher than in the other direction.

Moreover, the OECD has developed an indicator which can be used to estimate the level of a country's participation within global value chains. It measures the value of intermediate goods imported as a share of the value of exports from a country, representing the importance of foreign suppliers in national production (backward participation). It is complemented by a second measurement which evaluates the share of the country as a supplier to other countries, representing the share of goods and services used as intermediate goods to produce exports from the other countries (forward participation). Combining these two types of participation provides a precise representation of a country's participation in the global value chains¹⁵.

Figure 3

Switzerland's participation in global value chains

Foreign inputs in exports of a country (backward participation) and domestic inputs used in exports of other countries (forward participation) expressed as a proportion of gross exports (%) at 2009 values



Source: Based on OECD, Global value chains: Switzerland, 2013

¹⁵ OECD, *Mapping Global Value Chains*, 2013, p. 11

Figure 3 shows the measurement of the participation of Switzerland and its main partners in global value chains. Medium-sized economies such as Switzerland, Belgium and the Netherlands use more foreign inputs to produce their goods than large countries such as the United States and Canada, which can more readily utilise domestic inputs. It is not, however, the size of the economies which determines the countries' participation index in the global economy but the proportion of intermediate goods incorporated in their exports together with the use made of these exports by other countries as intermediate products. The United States' participation index, measuring 40 %, is primarily influenced by the role played by exports from this country for use as intermediate products in other countries (approximately 25 %).

The Swiss participation index (52 %) indicates a high level of integration in global value chains¹⁶. Swiss exports show a high content of imported goods, with almost half of the value of Swiss exports in the textiles and chemical industries generated abroad whereas the average for the export industry as a whole is 30 %. The foreign value content has increased since 1995, demonstrating the growing integration of Switzerland in global value chains. This trend can be explained by the particular positioning of Switzerland in terms of direct investments, as the relationships between company headquarters and subsidiaries are fundamental for global value chains. The OECD estimates that 40 % of employment in Swiss private sector companies is supported by foreign final demand¹⁷.

Switzerland has sufficient statistical data to measure its trade in terms of value added. To refine the analysis, it would nevertheless be useful to improve the periodicity of the data available and to encourage the collection of data specific to the effects of global value chains on employment and investment income.

1.1.4 The prominent role of services in producing goods

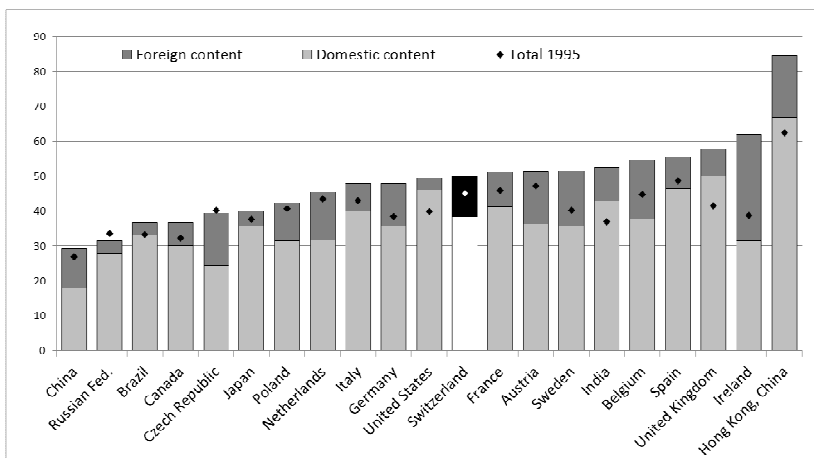
The creation of a product now extends beyond the simple production process and requires a series of services along the global value chain. As Shih's diagram shows, the boundaries between goods and services are becoming increasingly blurred and it is difficult to distinguish the share of services in the creation of a product. Using an increasingly varied range of services (financial, legal, IT, R&D, logistics, advertising, etc.) in the production and distribution process of goods leads to talk of the "servicification" of the economy¹⁸. This concept covers both the use of the Global Positioning System (GPS) to assist farmers in their work in the fields and the use of remote control devices produced by aeroplane manufacturers.

¹⁶ OECD/WTO, *Trade in Value-Added (TiVA) Database*, January 2013 (figures for 2009) and *Global Value Chains: Switzerland*, p. 1-4, May 2013

¹⁷ OECD, "Trade and employment" *Science, technology and industry: OECD management chart*, 2013

¹⁸ Patrick Low, *The Role of Services in Global Value Chains*, 2013, p. 7-9

Share of services value added as a proportion of gross exports of goods, 2009



Source: WTO/OECD, Trade in Value-Added (TiVA) Indicators: Switzerland, 2014

The new data on trade in value added shows that the services' share of world trade is larger than previously estimated (cf. figure 4). The share of value added from services in exports from OECD countries is approximately 50 % compared to only 25 % according to traditional statistics. This situation can in particular be explained by the fact that exports of goods include a large proportion of value added generated by the service sector (approximately one-third).

The analysis in terms of global value chains places Switzerland within the average of the OECD countries, with a large share of value added created by domestic services, thus confirming the good level of competitiveness of Swiss services. Business services play the foremost role in creating value added, followed by distribution services, financial and insurance services, transport services and telecommunications¹⁹. The value added per employee – the single most important determinant of wages – is very high in these sectors²⁰. It does however underline a new element: that Switzerland boasts real comparative advantages for certain services incorporated into manufactured goods.

1.1.5 The new challenges of international competition: looking for maximum gains in value added

A country's competitiveness can no longer be assessed solely on the basis of its exports. Indeed, it is determined by its capacity to specialise within the production chains in high value added activities. International competition now no longer relates to a final product but to a specific task within the value chain. Advanced econ-

¹⁹ OECD/WTO, *Global Value Chains: Switzerland*, p. 4, May 2013

²⁰ Christian Busch & Isabelle Schlupe Campo, *La Vie économique*, June 2013

omies have specialised in service activities and benefit from a comparative advantage in this sphere. The emerging countries have however taken advantage of this new situation by capturing entire segments of global value chains. Initially, they generally focussed on activities with low value added, primarily routine activities such as assembly (cf. example of the iPhone). They nevertheless quickly acquired the skills enabling them to obtain more value within the global value chains. In a global context of heightened competition, Switzerland must focus on highly qualified activities both upstream and downstream in the value chains and endeavour to maintain its position.

1.2 Switzerland at the heart of the value added chains and the new growth policy

Six main lessons can be learned from the development of global value chains.

- By limiting its imports of goods and services, a country penalizes its exporters. In an interdependent world, the ability to import goods of high quality at the best possible terms and conditions increases the productivity and international competitiveness of the companies. Trade liberalisation benefits exporters and importers alike, often in the same company.
- The effect of barriers to trade is multiplied by the fact that intermediate goods often cross borders several times before being incorporated in a finished product. Customs duties and administrative procedures required for the customs clearance of the goods – a costly process to a greater or lesser degree depending on the countries concerned – therefore accumulate along the global value, increasing production costs. Antidumping duties imposed by certain countries, the complexity and diversity of rules of origin and other non-tariff measures have the same impact. Consequently, eliminating tariffs and further simplifying customs procedures are the priority objectives of Switzerland's foreign economic policy. The same is true of the rationalisation of technical prescriptions by harmonising them or recognising certification standards and/or methods.
- Services, investment and international production methods without equity participation play a key role in the global economy. As the services content of Swiss exports is high, Switzerland will only maintain its competitiveness by aiming for excellence in this sector. Particular importance should also be accorded to the fluidity of the international trade in services. Furthermore, framework conditions guaranteeing the protection of and access to foreign investment markets enable our companies to take the best possible advantage of global value chains.
- Respecting sustainability aspects (environmental and social standards) throughout the production process can open up a new opportunity for Swiss companies to differentiate and put themselves in an advantageous position, in particular with regard to their commitment to corporate social responsibility.
- The global value chains are highly sensitive to all types of troubles. The earthquake which struck Japan on 11 March 2011 and caused a devastating tsunami and the Fukushima nuclear catastrophe not only resulted in the

heavy loss of human life but also seriously hampered Japanese production. The ripple effect of these catastrophes caused interruptions to industrial automobile production both in Europe and in the United States. This also led to price increases and supply shortages on the computer memory chip market. Finally, the floods witnessed in Thailand the same year caused major bottlenecks in the hard disc sector.

- Around the world, the financial crisis led to the introduction of protectionist policies combined with a trend towards interventionism in the fields of international trade, investment, taxation and immigration. It is important to ensure that these trends – which are damaging to the prosperity of Switzerland and more particularly to the labour market – do not interfere with the value chains which are now highly integrated at the global level. In this context, communication is also essential both at the national level (highlight the advantages linked to opening up the markets) and with regards to foreign economic policy (benefits from an active participation in the international organisations and forums).

1.2.1 Implications for foreign economic policy

The rise of the global value chains is a global phenomenon which calls for a global approach. Within the framework of its foreign economic policy, Switzerland already has the fundamental tools enabling it to manage this economic phenomenon (cf. Report on foreign economic policy 2004 and 2011²¹). To enable it to apply these instruments on a targeted basis Switzerland must work hand in hand with partner countries willing to develop innovative bilateral, plurilateral and multilateral solutions.

Global value chains combine industrial, service and investment activities. The international regulatory framework must therefore incorporate these three inseparable components and extend its scope to cover the largest possible number of countries. It must also offer effective protection for intellectual property in order to create the climate of trust necessary to the transfer of technology. Merely facilitating the trade of goods between two countries is not sufficient in itself if, elsewhere, the companies linked via a value chain have severely restricted access to the most efficient services or if the innovations they have developed at considerable cost are counterfeited or pirated. It is also important that the potential of economic globalisation contributes to the social and environmental dimensions of sustainable development.

The multilateral approach embodied by the WTO is without any doubt the best solution to the needs of the economy of the 21st century. The WTO enjoys an almost universal geographic coverage and already incorporates the trade in goods and services as well as the protection of intellectual property. Ideally, the scope of the WTO should also apply to investment and competition. There would also be good reason to develop effective cooperation between the WTO and the intergovernmental bodies tasked with promoting and ensuring the application of social and environmental standards on a standardised basis. The international system created in this way would be tailored to global value chains. Switzerland will work towards this

²¹ FF 2005 993 and FF 2012 675

goal in the knowledge that this project is currently facing numerous pitfalls and that the path ahead will be very long.

From a short and medium-term perspective, Switzerland will stand resolutely against protectionist measures which have proliferated since the crisis of 2009. It will endeavour to revitalise WTO talks and continue to promote multilateral agreements on the liberalisation of the trade in goods and services. It will support efforts aimed at ensuring the full and complete implementation of the Trade Facilitation Agreement signed in 2013 during the ministerial conference in Bali (cf. ch. 2.1). Undertaking global trade facilitation reforms could indeed reduce transaction costs significantly. Switzerland will also participate in the plurilateral initiatives launched alongside the WTO by groups of countries keen to define a regulatory framework better adapted to the needs of global value chains. This is the case of the negotiations for a plurilateral agreement on services currently being held in Geneva (cf. ch. 5.3).

It is also important to continue strengthening and extending the network of free trade agreements which Switzerland has developed over more than two decades with non-EU member states (cf. ch. 4). Furthermore, the rise of the global value chains requires previous partial agreements or agreements covering only the trade in goods to be extended and updated. The effort will primarily focus on the agreements signed with the key commercial partners. Furthermore, numerous companies have decided not to take advantage of the benefits of the agreements in force due to the huge complexity of the rules relating to origin and the significant administrative costs of implementing them. Against this backdrop, Switzerland will actively engage in work to simplify and harmonise the preferential rules on origin within the framework of its negotiations in order to better take the needs of its industry into consideration (cf. ch. 5.1).

The negotiations conducted by the United States both within the framework of the Transatlantic Trade and Investment Partnership (TTIP) and the Trans-Pacific Partnership (TPP)²² are perfectly aligned with the development of global value chains. If successful, these two agreements will cover almost 60 % of American trade relations (cf. ch. 4.1). The conclusion of the TTIP could represent a disadvantage to Switzerland which could be excluded from the preferential conditions granted on a reciprocal basis by the United States and the EU, its two main trade partners. The development of this process will continue to be monitored by the Federal Council which, when the time arises, will examine the options available to Switzerland including i) acceding to the TTIP provided that the agreement is accessible to other states; ii) negotiate a free trade agreement with the United States or iii) pursue the current policy without any major reorientation. The Federal Council will endeavour to maintain the competitiveness and attractiveness of the Swiss economic hub while not forgetting the impact of the different options on the economic sectors concerned and associated jobs as well as on the protection of both the consumers and the environment.

²² The two American trade initiatives are the TTIP, launched in 2013 which aims to establish an agreement between the United States and the EU, and the TPP, launched in 2010 and relating to an agreement between the United States and a dozen countries in the Asia-Pacific Economic Cooperation zone, or APEC. Such a free trade zone would cover almost two-thirds of the global economy.

Switzerland endeavours to improve access to the market for direct investments by means of free trade agreements and agreements on the promotion and reciprocal protection of investments. The rules concerning the fight against corruption among foreign public officials²³ and the guiding principles of the OECD for multinational companies provide effective supervision of international investment (cf. ch. 5.4). Switzerland will continue to participate actively in defining these rules, in particular those aiming to improve corporate social responsibility.

The bilateral trade agreements concluded with the EU (cf. ch. 3) are crucial to the success of Swiss companies in the value chains across Europe. They are the most important economic agreements Switzerland has negotiated and its prosperity and a significant number of jobs are heavily dependent on them. Proof of this is the value of Swiss trade with the EU (accounting for approximately 55 % of Swiss exports in 2013) over the past ten years. The joint application of bilateral agreements provides the Swiss economy with framework conditions supporting the solid position of our companies in the European value chains. Protecting and strengthening this privileged position is nevertheless not guaranteed insofar as the EU regulatory framework is constantly changing. Ensuring that the Swiss economy benefits from terms for participation in the single market similar to those enjoyed by its competition in the EU requires a dynamic adaptation through the consolidation and renewal of the bilateral axis, the main objective of the Federal Council.

Agreements aimed at avoiding double taxation on income and wealth also play an essential role in the development of trade while contributing towards the success of Swiss companies in the global value chains. The current network, based on some ninety agreements signed by Switzerland, should be extended.

The development of global value chains also has implications for the integration of developing countries (cf. ch. 6). The Swiss policy of development cooperation can play a role through its agencies by helping to build the capacities of the partner countries to develop and implement coherent economic policies aimed at ensuring sustainable development. Furthermore, Swiss cooperation promotes trade integration adapted to the needs of the developing countries and their populations. Particular emphasis is placed on the implementation of technical requirements relating to quality, the introduction of new packaging methods and the incorporation of social and environmental standards. This approach promotes coherence between the trade rules, the fundamental labour standards and environmental protection with a view to ensuring sustainable development. Through these efforts in favour of integrating developing countries into the global value chains, Switzerland actively supports the WTO trade assistance programme.

Recent developments in the field of global taxation also represent a fundamental development for Switzerland (cf. ch. 2.2.2 and 2.6.1). On 15 July, the OECD Council formally approved the new standard for the automatic exchange of information for tax purposes which was validated by the Finance Ministers of the G20 countries in September. Switzerland informed the Global Forum that it intended to introduce the new standard in 2017/2018, subject to the parliamentary approval process. Furthermore, the OECD “Base Erosion Profit Shifting” project was broadly supported within the international community and in particular among the G20. The work scheduled in the action plan should be finalised by the end of 2015.

²³ Agreement of 17.12.1997 relating to the fight against corruption among foreign public officials in international commercial transactions (RS **0.311.21**).

The increasing internationalisation has also seen Switzerland Global Enterprise (S-GE) – an association under private law tasked with promoting exports for a number of years extending its range of services aimed at exporting SMEs and its network of experts. (cf. chap. 9.1.1).

1.2.2 Implications for domestic market policies

While the strong international competitiveness of Switzerland is broadly recognised, the high level of prices on the domestic market continues to detract from the competitiveness of Swiss exports²⁴. These high prices are the result of the lack of competition on the domestic market and costly national regulations (regulation of network industries, barriers to trade, agricultural protectionism, public services and heterogeneous cantonal applications of federal laws). The impact of these factors is greater on price levels in Switzerland than on wages. Within the development of global value chains, this lack of domestic competition also weakens the international competitiveness of the Swiss economy. Against this backdrop, the reforms aimed at stimulating the domestic market are crucial to maintaining and strengthening the competitiveness of our export economy.

The recent financial crises have illustrated the importance of economic resilience understood as a country's capacity to prevent and absorb external economic shocks while maintaining sustainable long-term growth. The impact of financial services on trade during the recession of 2009 was very notable²⁵. If we are to be able to maintain the advantages of economic openness and avoid the protectionist knee-jerk reactions so damaging to our economy, risks of external economic contagion should remain manageable. The various domestic institutions²⁶ which determine the level of economic resilience therefore indirectly represent the tools for achieving the gains of economic openness while improving the process of risk management.

Different domestic economic policies therefore impact, either directly or indirectly, on the level of Swiss competitiveness on the international level and on jobs. The following nine areas, which are not an exhaustive list, highlight the intensity of the interactions between domestic market policies and foreign economic policy.

Economic freedom, legal security and the low level of corruption

The national institutions are fundamental in explaining the economic success of a country. Entrepreneurial freedom – which can only be effective through respect for the right of ownership, the freedom of transaction, personal safety, legal safety and the efficient provision of state services – is the crucial element in organising efficient markets and ensuring competitiveness. International openness alone is not sufficient. In this respect, Swiss institutions are similar to those in the best-performing countries. This institutional quality should be developed in the future, for example by enhancing mutual international administrative aid in fields such as competition law (cf. 5.6) and intellectual property. It is one of the reasons underlying

²⁴ IMD, *World Competitiveness online databank*, 2014,

²⁵ CEPR, *The Great Trade Collapse: Causes, Consequences and Prospects*, E-book, VoxEU, edited by R. Baldwin, 2009

²⁶ At national level, these are the SNB, the FINMA, the debt brake, automatic stabilisers, unemployment insurance, the flexibility of the labour market and the facility with which new companies can be created.

ing the attractiveness of Switzerland to international companies and highly qualified individuals.

The flexibility of the labour market and the free movement of persons

The flexibility of the labour market is necessary for a country as open as Switzerland. It enables companies to seize short-term and long-term economic opportunities and to change direction while minimising adjustment costs. For employees it offers a guarantee for higher wages, justified by productivity, and shortens periods of unemployment²⁷. Safety nets, such as unemployment insurance, support the flexibility of the labour market. The flexibility of local labour market institutions is of particular advantage to companies faced with fluctuating demand, as is often the case in the export sector. In the global value chains, this flexibility of labour is constantly increasing. It enables Swiss employees to focus on high value added tasks and stimulates the dissemination of innovations²⁸.

In light of the need for a certain degree of flexibility, the free movement of persons to and from the EU (cf. ch. 3.2) is an essential framework condition for Swiss companies wishing to recruit qualified staff. This instrument has helped reduce the shortage of skilled labour, in particular during economic upswings²⁹. The observatory of the free movement of individuals confirms this globally positive assessment³⁰. The complementarity between Swiss expertise and that of foreigners is the key factor in this social and economic success. For example, in the global value chains, free movement has made it possible to provide companies with quality services, one of the tasks with the greatest potential for value added.

The reintroduction of quotas scheduled in the new constitutional article 121a from 2017, risks diminishing the attractiveness of the Swiss economy, along with its growth potential and resilience, in particular if the companies were to lose their certainty for planning or if heavy new administrative procedures were introduced. In the long term, innovation, entrepreneurship, competition and economic openness could also be affected by reduced migratory flows³¹. This change in direction of migration policy will also have implications for the measures aiming to make better use of the local labour potential.

The high level of human capital

The level of human capital in Switzerland enables it to differentiate itself on a globalised labour market and consequently earn a high level of income. The Swiss system delivers a comparatively high standard of education, even if marginal improvements are necessary, among other things to overcome the lack of qualified

27 Romain Bouis & Romain Duval, *Raising Potential Growth After the Crisis*, OECD Economics Department Working Papers No. 835, 2001

28 Gavin Murphy, Julia Siedschlag & John McQuinn, “*Employment Protection and Innovation Intensity*”, WP no. D 64, 2012

29 Arvanitis Spyros, Marius Ley, Florian Seliger, Tobias Stucki & Martin Wörter, *Innovationsaktivitäten in der Schweizer Wirtschaft, 2013*, and Stalder Peter, *Free Migration between the EU and Switzerland, Swiss National Bank Research*, 2011.

30 Reports of the observatory on the free movement of individuals between Switzerland and the EU, “www.seco.admin.ch > Documentation > Publication and forms > Studies and reports > Labour > SECO reports – Repercussions of the free movement of individuals”

31 Conclusions of the special economic trends topic (SECO, autumn 2014).

personnel³². Compatibility between companies' needs and professional training is one of the recognised advantages of the Swiss education system. Training should nevertheless be constantly reviewed to maintain and enhance this level. Language teaching, the capacity to integrate foreign pupils, the duality of the "hautes écoles" system, the high quality of the apprenticeship system and the attractiveness of Swiss universities to foreign students and teaching personnel all impact on Switzerland's foreign trade to a certain extent. This is also true for the capacity to incorporate new technologies from abroad in the field of sciences. Switzerland's participation in the EU training programme is a tangible example of where training human capital improves international competitiveness.

The innovative capacity

The excellence of the education system and diversity of know-how represent only the first stage in constituting an efficient and innovative system which offers Switzerland an advantageous position in the global value chains. In addition to the educational policy, Swiss research policy – based on the principles of state funding for fundamental research and of mostly private funding for applied research – has proved its worth. It has contributed to maintaining the competitiveness of Swiss exports during periods when the franc was strong. This innovative capacity would be inconceivable without an international openness (e.g. cooperation agreements within the EU framework research programmes; cf. ch. 3.2).

The tax system as a whole

For innovative companies and the attractiveness of the Swiss economy, the tax system is a major boon. The third reform of corporate taxation is an important issue. The reform has three objectives: to maintain a competitive tax burden for companies, to re-establish international acceptance and to protect the financial yield from taxes on income for the Confederation, the cantons and the municipalities. Together, the measures planned within the reform are capable of increasing the fiscal appeal of Switzerland. For example, a licence box or the elimination of stamp duty on equity directly encourage investments in Switzerland. The adaptation of the participation deduction and the offsetting of losses without any time limit enable to eliminate recurrent taxes on holdings. The aim of the reform is to assume a minimal return on equity. Furthermore, it will facilitate equity deals and reallocation of capital. These points are particularly advantageous to small, innovative companies which need more equity for their funding. By providing for the adoption of rules compliant with the international standards, this reform will allow legal certainty to be improved for companies.

The appeal of Switzerland to foreign innovators and entrepreneurs is also strengthened by the moderate taxation of natural persons (e.g. taxation of stock options). With regard to indirect taxes, the key factors are the administrative burden and legal safety: potential for improvement still exists with regard to specific points (e.g. the multiplicity of VAT rates, administrative charges).

³² www.wbf.admin.ch > thèmes > Formation, recherche, innovation > Davantage de personnel qualifié

Administrative simplification, cyber-administration and policies favouring SMEs

The administrative burden affects SMEs and start-ups in particular. While the relationship between companies and public administration is generally good in Switzerland, progress is necessary in particular on the speed and administrative costs of the procedures for creating or closing companies. While the majority of young companies do not start exporting immediately, they contribute to regenerating the Swiss industrial fabric whilst at the same time stimulating competition. They are integrating themselves within the global value chains increasingly more rapidly, thanks in particular to subcontracting activities for multinationals. Administrative simplification also impacts on trade facilitation, such as consistently lowering technical barriers to trade (e.g. by implementing proposals in relation to the electronic management of customs formalities, cf. ch. 5.1.2).

The agricultural policy and land management

The national agricultural policy is also a challenge for the foreign economic policy. There is potential for international openness, in particular for exports of food products. For example, exports of cheese to the EU offer farmers sustainable outlets. In the long term, new means of reconciling international openness and the maintenance of farmers' incomes must be found. The agricultural sector could therefore benefit from a more competitive supply system thanks among other things to increased international openness³³.

More generally speaking, international openness is linked to land management. The free movement of individuals has had a greater impact than expected. However, Switzerland's capacity to absorb migratory flows depends on flexible land management, adequate building rights and infrastructure planning. The capacity of foreign companies to invest in Switzerland also depends on these same factors. The design of these factors falls within the competence of the central government, cantons and municipalities.

Regulation of network industries and infrastructures

The quality of the national infrastructure networks (electricity, road and rail) is an essential condition for the expansion of trade. Major investments made in this sector in Switzerland indirectly support the Swiss foreign economic policy and will only be economically interesting if they provide the prospect for an intensification of trade.

Some Swiss network industries (electricity, gas, rail) are among the least liberalised in the OECD countries³⁴. Swiss regulations pose a burden on the productivity and efficiency of the sectors concerned. Yet the competitiveness of the economy as a whole is indirectly affected by the higher cost of the intermediate services provided by these sectors³⁵. According to the OECD, liberalisation in the network industries has given rise to productivity gains benefiting the economy as a whole and stimulating the value chains. They have enabled companies working on networks to acquire

³³ BAKBASEL (Mai 2014), "*Landwirtschaft - Beschaffungsseite, Vorleistungen und Kosten der Vorleistungen*," Study on behalf of the Federal Bureau for Agriculture

³⁴ OECD *Regulatory Reform and Competition Policy: Indicators of Product Market Regulation*

³⁵ Goods and services other than fixed investments in a company's production and which are produced elsewhere in the economy or imported. Intermediate services are processed or used in the production of the company that purchased them.

know-how more quickly. Most networks operate on a cross-border basis and are increasingly subject to international agreements beneficial to all parties (e.g. the bilateral agreement with the EU on the subject of electricity, currently being negotiated).

The opening of the services market

Based on national regulations, the OECD has recently developed indicators measuring the level of trade restriction in forty countries³⁶. According to this analysis, Switzerland is not one of those countries providing a model example when it comes to openness to the trade in services. As shown in figure 5, it has a higher level of restriction than the average of the countries in numerous sectors (legal advice, accounting, IT, postal services). The indices are calculated on the basis of national regulations (e.g. with regard to transparency, competition and the movement of persons). The value of the index ranges from zero to one, with one being the most restrictive level and zero the most open.

The regulations affecting the cross-border movement of service providers have a negative impact on the degree of openness to the trade in services in Switzerland. The result for Switzerland is also affected by the continued existence of state monopolies in certain market segments, such as postal services. Moreover, the best performing services in terms of value added (banks) are those which are subject to the least restrictive regulations.

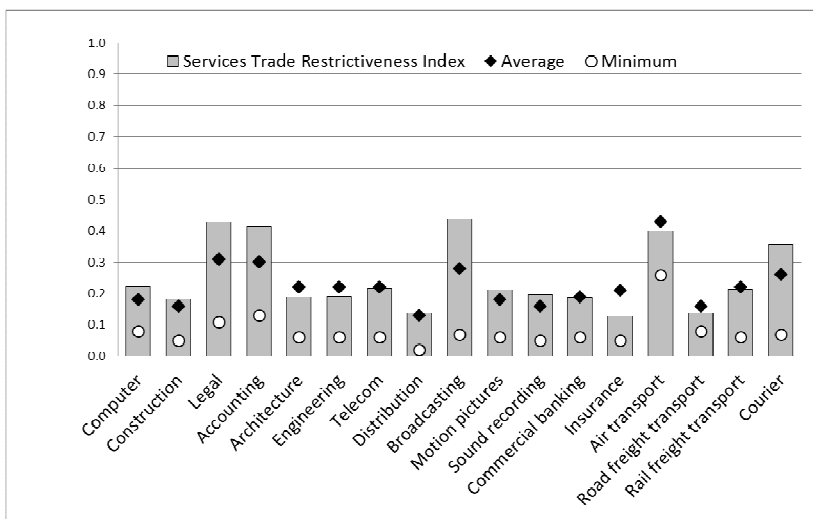
With services representing an ever increasing share of trade, Switzerland could improve the efficiency of its economy by implementing the regulatory reforms necessary to increase competition.

The free movement of persons is crucial for improving the OECD restrictiveness index for the trade in services. On the other hand, the accompanying measures for the free movement of persons have the potential to hamper the fluidity of the trade in services even if they can be justified by the pursuit of socio-economic objectives.

³⁶ OECD, *Services Trade Restrictiveness Index, 2014*. This study incorporates the OECD countries and the major emerging economies.

Index of restrictiveness to the trade in services in Switzerland compared to other countries

A high index means that the sector is restrictive



Source: OECD, Services Trade Restrictiveness Index, 2014

1.3 Conclusion

The international fragmentation of the production of goods and services is not a recent phenomenon. It has developed over time with the opening of the markets. It is the scale of the phenomenon which has intensified considerably in recent decades: today, few goods and only some local or regulated services are still protected against international competition. The large majority of companies now incorporate their production in global value chains. In light of this large-scale globalisation, the choice of national economic policies is decisive to protect and strengthen the competitiveness of the Swiss economy.

Global value chains call for two levels of action:

- at the international level: Switzerland's current foreign economic policy remains for the most part relevant. It must nevertheless take into account the developments of our large European partner and the ongoing monumental processes (TTIP, TPP) while combatting the recent protectionist trends observed in various areas. With its almost universal geographic coverage in the trade in goods and services, as well as in the protection of intellectual property, the WTO remains the natural partner to support the rise in development of global value chains. Switzerland will continue to support efforts targeting the full and complete implementation of the trade facilitation agreement. In bilateral terms, it is important to consolidate and extend Switzerland's net-

work of free trade agreements. The simplification and harmonisation of preferential rules of origin also represents a key element for the Swiss export industry. As for the TTIP and TPP, the Federal Council will have to choose, when the time arises, between the different options designed to preserve Swiss competitiveness. In order to maintain the high level of Swiss integration in the value chains across Europe and its privileged access to the European market, the consolidation and renewal of the bilateral relationship with the EU will be crucial.

- at the internal level: numerous domestic economic policies have a real impact on the level of Swiss competitiveness. The current advantages of Switzerland, such as its labour market, its human capital and its innovative capacity, should be preserved. Against this backdrop, the implementation of targeted institutional and sectorial public policies should be pursued. The flexibility of the labour market, the promotion of innovation and entrepreneurship, the level of education and its alignment with the market needs, reducing the administrative burden, the exploitation of economies of scale in the network industries and the openness of the services market are all fields to which increased attention should be paid against the backdrop of a globalised economy.