

Chapter 11

The Future of Switzerland*

11.1 Introduction

The preceding chapters show that Switzerland has been economically and politically highly successful, at least if compared with other real economies but not with an absolute ideal. Perhaps most importantly, it has provided its citizens with the conditions necessary in order to become highly satisfied with life. But will this also apply in the future? Is the 'model Switzerland' fit for the years to come? What has to be, and what can be, improved?

To answer these questions we have to understand how the Swiss system works and what its most important problems are. Thus, we have to synthesize the observations about Switzerland discussed in this book. From a traditional perspective the Swiss success is puzzling. According to standard international statistics Switzerland has a very high income per capita but low productivity and low growth, as shown in Sect. 11.2 of this chapter. In Sect. 11.3 we shortly discuss two traditional explanations for this puzzle but reject them. We look therefore at the puzzle again in Sect. 11.4 and find that Swiss income is probably even higher than official statistics reveal, making the puzzle even more puzzling. However, from a modern economic perspective there are quite simple explanations for the inconsistent observations, as argued in Sect. 11.5: Due to its specific political institutions, Switzerland has not only a highly flexible economy but also a high price level.

Will the success of Switzerland also prevail in the future? Progressing globalization faces Switzerland with many challenges. Again, due to its political institutions, Switzerland seems to be prepared to successfully face these challenges. But could globalization not undermine the effectiveness of Swiss institutions, and could the free migration of individuals not lead to downward pressure on Swiss wages and, thus, income per capita? Fortunately there are fruitful solutions to all the problems ahead as pointed out in Sect. 11.6. Finally, we address effective policy reforms in Sect. 11.7 and offer some concluding remarks in Sect. 11.8.

*This chapter has been written with the help of Marco Portmann and David Stadelmann.

11.2 Switzerland's Puzzling Performance

The economic success of Switzerland is puzzling from many perspectives. We highlight this puzzling performance by focusing on income, productivity, price levels and political institutions.

High income. From an international perspective, Switzerland is economically highly successful. In 2011 and 2012, GDP per capita was about 85–90 % higher than in neighboring Germany and about 35 % higher than in Denmark when IMF or OECD data are considered and when they are converted by current exchange rates. At the same time, the explicit government debt of Switzerland is about 40 % of GDP and, thus, slightly lower than the Danish debt and much lower than the German one of about 80 %. Even more impressive, the implicit government debt of Switzerland, i.e. the future pension payments which are not covered by expected contributions and capital funds, is only about 45 % of GDP whereas, e.g., the German implicit debt is somewhere between 200 % and 300 % of GDP (see, e.g., Raffelhüschen et al. 2010; Moog and Raffelhüschen 2011).

Low productivity and low growth. The growth and productivity data as provided by international financial organizations as well as the Swiss government contradict the positive perspective just mentioned. According to standard data Switzerland has not only had low economic growth for decades (see extensively Borner and Bodmer 2004) but also the level of its labor productivity is considered to be low. The OECD database indicates that in 2011 Switzerland has only had 85.7 % of US productivity. While this is about the level of Austria (85.3) it is slightly behind Denmark (88.2) and starkly contrasts with the European productivity champions Germany (91.6), France (95.7), Belgium (98.1), the Netherlands (99.2) and of course Luxemburg (130.8).

High price level and large exports. Switzerland is not only rich, but the Swiss price level is also much higher than in most comparable countries. Thus, there is an intense public discussion in Switzerland about Switzerland being a “price island”. Indeed, in Switzerland GDP per capita adjusted for purchasing power parity (PPP) is only about 15–20 % higher than in Germany, or put the other way round, the current Swiss Franc exchange rate is much above purchasing power parity. Moreover, the real exchange rate is revaluating over the long term against the US Dollar, the Euro and also the Danish Crown with 0.7–2 % annually (see Chap. 2). Thus, the Swiss Franc seems to be much overvalued. While countries with such overvalued currencies usually have negative trade balances Switzerland has a huge trade surplus, i.e. almost 12 % of GDP in 2011.

Chaotic political institutions. Switzerland differs from all other countries with respect to its political institutions. Besides tiny Liechtenstein, it is the only country in the World in which the citizens have a direct say via initiative and referenda at all government levels, and it is probably by far the most decentralized country. While the common indices measuring decentralization usually position Switzerland at the top together with USA and Canada (see, e.g., Sorens 2011 or Díaz Cayeros 2006), Switzerland is much smaller than most other federations and has about the size

of an average US state. Thus, the 26 Swiss cantons with populations ranging from 13,000 (Appenzell Innerrhoden) to 1.4 million (Zurich) are much smaller than US states or Canadian provinces although they exhibit about the same degree of autonomy from the federal government. Again, it is interesting to compare Switzerland with Germany which according to most indices is the second most decentralized European country. The largest Swiss canton Zurich has a population (1.4 million) and an area (1,729 km²) which are similar to the smallest German Bundesland Saarland (1.0 million and 2,569 km²)¹ which according to many German politicians is too small to become economically successful and to stay independent. Similarly, Switzerland has about 2,500 municipalities with on average 3,200 inhabitants which is about 43 % of German municipalities and 5.7 % of Danish municipalities.

Imagine that somebody proposes to reform a country in the following way: (1) to split it into autonomous regions with on average 300,000 inhabitants, which again are decentralized into smaller subunits with about 3,200 inhabitants but large fiscal autonomy; (2) to allow the new local jurisdictions to raise their own income taxes and to decide on large parts of their expenditures; (3) to empower the citizens to decide on most matters themselves. Most politicians would argue that such a system cannot work but directly leads into chaos. Actually, such reservations against direct democracy and small-scale federalism are common also in Switzerland. For instance, Borner and Bodmer (2004) who otherwise provided a marvelous analysis of Swiss growth performance saw Swiss political institutions as a main determinant of low economic growth in the 1990s. Similarly, many contributions from the liberal think tank Avenir Suisse aim at merging the small Swiss municipalities and cantons into larger units (see, e.g., Blöchlinger 2005; Rühli 2012). Thus, the interesting question is the following: How can Swiss economic success and Swiss political institutions coexist?

11.3 Simple Traditional Explanations Fail

The astonishing economic performance of Switzerland is often explained by either a “tax haven” or a “war profiteer” hypothesis. Thus, it is argued that Switzerland benefits to a tremendous extent from its banks and its banking secrecy providing shelter to money from all around the world fleeing from taxation. Indeed, Switzerland is the world’s leading place for private banking and wealth management and hoards about 25 % of all off-shore private wealth. However, the importance of foreign non-taxed assets for the Swiss economy is usually much overestimated. In Chap. 5 a discussion of the contribution of foreign non-taxed assets to Swiss GDP is provided. But there are good reasons to see it differently. The total volume of assets with Swiss banks is 5,600 billion Swiss Francs. Thereof

¹ The city state of Bremen is even smaller (660,000 inhabitants).

2,000 billion are owned directly or indirectly via legal constructs such as trusts by foreign individuals and are thus susceptible for being non-taxed (see Schweizerische Bankiervereinigung 2011). If one assumes as an upper bound that 80 % of these assets are non-taxed and that the banks earn a gross return of about 1 % on them, the banking sector makes a total gross profit of 16 billion Swiss Francs and a net profit of about 6–9 billion on non-taxed assets which is about 1–1.5 % of GDP. Even if one assumes as an absolute upper limit estimate that the banks' gross return is 1.25 %, the total net profit is still not more than 12 billion Swiss Francs which is about 2 % of total GDP. This is consistent with an alternative approach to assess the relevance of non-taxed wealth. The Banking sector contributes about 7 % to GDP. If one considers that about 35 % of the total assets of 5,600 billion are owned by foreign individuals, and that only a fraction of the privately owned money is non-taxed, the share of Swiss GDP generated with foreign non-taxed money cannot be large, i.e. hardly more than 2 % of GDP. Finally, it has to be taken into account that the respective assets are deposited in Switzerland not solely for tax reasons. It is plausible that a good fraction of the funds are in Switzerland not because Switzerland is a tax haven but because it is a safe haven, i.e. large parts of the funds would stay in Switzerland even if they were taxed. Thus, Switzerland is rich not because of sheltering non-taxed foreign wealth but despite of all the problems involved with it.

The second simple attempt to explain away Switzerland's success is that it has been miraculously prevented from being drawn into the two world wars. However, Switzerland has not been rich only since the end of World War I. It became comparatively rich at least after 1780 when the industrial revolution started not only in Great Britain but almost at the same time also in Switzerland (see also Chap. 2). Later on, Switzerland became one of the richest countries after the new liberal Federal constitution had been enacted in 1848. Thereafter it stayed rich but did not fall back like many other rich countries which were prevented from the wars, such as the Latin American countries Venezuela or Argentina and some European countries like Sweden or Portugal. From an international perspective, Switzerland reached its highest relative income during the recovery after WW II, which is a clear indication for Switzerland being successful not because the other countries suffered from the wars but because it was better than most other countries at benefiting from the European recovery and increasing world trade after WW II. Thereafter, it stayed richer than one would expect based on convergence theory. As growing is more difficult for rich than for poor countries one should expect systematic convergence of countries with respect to their income level. While this turns out to be true within the group of countries which are integrated in the world markets, Switzerland indeed had much lower growth than almost all other countries. But it had a better growth performance than convergence theory would predict at least in the 1950s and 1960s. Its performance in the 1970s and 1980s can be looked at from two perspectives. If one stares only at real GDP Switzerland seems to have performed at or a little bit below the convergence path (see Borner and Bodmer 2004: 51). However, if one takes into account that the Swiss growth rate is underestimated by about 0.5 % (see also sect. 11.5.3 of this chapter)

because the consumption value of Swiss GDP is steadily improving for the real appreciation of the Swiss Franc (or, respectively, the systematic increase in the Terms of Trade, see Kohli 2004; Borner and Bodmer 2004: 38), Switzerland performed above the convergence path in the 1970s and 1980s. However, in the 1990s its performance was below what convergence would imply independent of the measure for GDP, while it can be assumed to again have performed above the converge path in the 2000s. Thus, Switzerland's over-performance cannot be explained by war-profiteering. It has a much longer history and does also prevail for most decades after the war and even today. Therefore we have to look for more powerful explanations. But before that we have to discuss whether Swiss performance is not even much better than what we usually observe.

11.4 The Puzzle Becomes Even More Puzzling

Switzerland seems to be special in several respects. Thus it is important to ask whether standard measures adequately reflect Swiss economic performance. Indeed, there are several reasons for why standard measures ought to be used even more carefully when Switzerland is concerned.

Today, economists most often use GDP (which measures the economic activity within a country) as a standard measure. However, one could also argue that GNP (which measures the economic activity of the permanent residents of a country) is more adequate for Switzerland. Switzerland is heavily integrated in the world market. Due to its high price level and other characteristics specific to Switzerland much of the growth of Swiss firms takes place abroad. Indeed, Switzerland seems to be the only developed country the GNP of which is clearly larger than its GDP (e.g., by 5.9 % in 2010). Thus, Switzerland turns out to be even better off when assessed with GNP.

GDP and its growth are two of the most important measures to assess the state of an economy. As it is well known they systematically affect the reelection chances of governments. Thus, it can be safely assumed that governments of representative democratic countries like to see high GDP and growth figures. Indeed, there are several ways to trim up the respective data. A nice but only quite recent method is to include estimates for the shadow economy into official GDP data. While many European countries are doing so, Switzerland does not (see Andrews et al. 2011) – which is not surprising given that Switzerland has no government which suffers from a reelection constraint. Assuming that the adjustments done by statistical offices are adequate but that normal official GDP figures already reflect part of the Shadow economy, Swiss official data underestimate total GDP (official plus shadow activity) by about 3–5 %.

Last but not least it is an open question whether Swiss economic performance should be judged according to GDP adjusted for current exchange rates or GDP adjusted for purchasing power parities (PPP). This not only makes a larger difference in the case of Switzerland than in most other developed countries. But there

are also some good arguments suggesting that GDP adjusted for PPP gives a biased picture.

First, the international comparison program only accounts for differences in prices but not in quality. However, there is some indication that in Switzerland the quality of, for instance, housing, retail trade and some other services is better or at least different than in many other countries which leads to a downward bias in official data. According to a study commanded by the Swiss administration 25 % of the price differences can be explained by differences in quality (which seems to be a bold estimate) and 49% by differences in regulations concerning environment, health, social policy, security, and animal rights (Iten et al. 2003).² While the disadvantages of higher quality and cost augmenting regulations, i.e. the high prices for goods and services, are shrinking GDP adjusted for PPP, large parts of the benefits of high quality and specific regulations are not fully reflected in the GDP figures. After all specific Swiss regulations result from a democratic decision process. They are decreed not least because they are assumed to have also some positive effects beside their negative effects on the price level.³ Thus, again, Swiss GDP is likely to be biased downwards when internationally compared.

Second, purchasing power parity is heavily affected by housing costs. However, housing costs are endogenous to between-country GDP and welfare differentials. As it is well known the benefits and costs of living in a specific jurisdiction capitalize into property prices and rents (see Stadelmann 2010; Stadelmann and Eichenberger 2008, 2012). Actually, it seems that full capitalization of net benefits occurs with respect to within-country differences (see Credit Suisse 2011). Between-country differences are plausible not to capitalize fully but to do so to an ever-increasing extent due to increasing between-country mobility. Thus, between-country differentials with respect to welfare are increasingly compensated by high property prices and rents. In equilibrium, welfare differentials will not show up anymore in the GDP adjusted for PPP but only in property prices. In the aggregate, Swiss citizens will not be rich because of high Swiss GDP adjusted for PPP but because they hold a high wealth in real estate either in the form of their own private housing unit or via the investments of their pension plans.

To sum up, we have seen a bunch of arguments which all speak in favor of Swiss welfare and thus productivity being substantially higher than what is reflected in official GDP data and their adjustment to PPP. Therefore, the puzzle which we have presented at the beginning of this chapter – Switzerland is very rich, but has slow growth and low productivity, has a very high price level, and has in some ways chaotic political institutions – becomes even more puzzling.

²The other sources of high prices were found to be low competition pressure (44 %), labor cost (11), and locational characteristics (17). In contrast, the advantage of having lower capital cost compensate for 45 % of the disadvantages.

³Of course, large parts but not all of the regulations are just implemented to generate rents for well organized interest groups.

11.5 Explaining the Puzzle

The puzzle can be explained with help from Modern Political Economy (see Frey 1978; Mueller 2003; Persson and Tabellini 2000) and its credo: institutions matter. Switzerland is rich because of its specific institutions, its price level is high because of its institutions, and its productivity and growth is usually judged to be low because of its institutions.

11.5.1 *Institutions Matter*

In traditional “Samuelsonian” welfare economics it is assumed that politicians maximize social welfare. But it is not only scientists who make such bold assumptions. Listening to the public discourse for instance in France and Germany one gets the impression that many citizens, journalists and also politicians start from the presumption that politicians can be expected to maximize social welfare. This, however, is neither the perspective of Modern Political Economy nor of the Swiss citizenry. In Switzerland, it is common wisdom that politicians and the state have to be constrained by effective institutions in order to prevent them from behaving selfishly. There is widespread consensus that politicians need to be controlled by giving the citizens effective direct democratic instruments and by intense interjurisdictional competition. Moreover, it is obvious that politicians suffer from a dramatic lack of information. Therefore, it is important that institutions are designed in order to provide policy makers, i.e. politicians and the citizens, with information. Perhaps, this critical but realistic view of the behavior of politicians is a consequence of Swiss institutions themselves. Most politicians are only part-time politicians and still have another profession to earn their lives, or at least they have had a normal profession before they became politicians. Therefore, politicians are not looked at as being different but just as normal human beings who are fallible to all human weaknesses.

This perspective starkly contrasts with the traditional view dominating welfare theory. If politicians maximize social welfare, there is absolutely no need for such costly controlling and information providing institutions. Of course, many proponents of welfare theory are no naives. They do not earnestly believe that politicians are intrinsically motivated to maximize social welfare but they explicitly or implicitly assume that today’s representative-democratic institutions force politicians to maximize social welfare. But again Modern Political Economy as well as Swiss popular thinking would argue to the opposite: There are many instances of policy failure. Today, there is a huge politico-economic literature which discusses many of these failures in depth. Thus, we will only pinpoint some of the effects which have been neglected so far in the literature:

11.5.1.1 The Benefits of Direct Democracy

In order to better understand the political process and its failures it is helpful to look at it as being some kind of a market, notably the most important market we know of. While there are actors who supply policies and other actors who demand certain policies, the two market sides interact by exchanging votes and money. Thus, politics is affected by the same kind of market failures as normal economic markets. It is well known that markets work better and fail less the lower the entry and exit costs, the easier consumers can substitute one producer for another, the better the consumers are informed about the products, the better the producers are informed about the preferences of the consumers, the more binding promises and contracts between producers and consumers, and the more secure the property rights for product innovations are.

Actually, the introduction of direct democratic instruments into representative democracy affects all these aspects: First, it is much easier to enter and exit the political process by founding a referendum committee and collecting the signatures necessary in order to get an issue on the ballot than to found a new party, get some representatives elected and then to try to affect parliamentary decisions; direct democracy is, thus, a means of making the political market more contestable. Second, in representative democracy citizens delegate their vote to a political party usually for 4 years, i.e. they can substitute their supplier of politics only every fourth year. In contrast, in Switzerland the issues at stake are usually voted on at four dates per year. Of course, most individuals do not thoroughly analyze all the issues themselves but they listen to the arguments and recommendations of the political parties and interest groups. For each issue they can choose whose advice to follow. Thus, they can substitute their suppliers of political wisdom much more easily than in a representative democracy. Third, the more referenda there are, the easier it is for the citizens to learn what exactly the political position of a politician or a political party is as politicians are forced to provide their positions and arguments during the intense public discourse which takes place before the vote. Fourth, the politicians learn from the referenda results as well as from the public discourse what the preferences and views of their voters are. Fifth, while party platforms and campaign promises are notoriously unbinding, referenda and initiatives take usually the form of constitutional or law amendments which are much more credibly enforced after being accepted than campaign promises. Thus, the public discourse before direct democratic decisions is much more focused and less ideological than the discourse during election campaigns. Sixth, in representative democracies it is very difficult for politicians to secure their property rights when developing a new policy proposal. The other politicians and parties can appropriate an idea for free when they deem it to have a good potential for attracting voters. Thus, the incentives of politicians to be creative and innovative are muted. In contrast, initiatives and referenda give politicians a formal instrument with quite secure property rights. When a politician designs an innovative law or

constitutional amendment and starts an initiative for it, other politicians cannot easily imitate the idea anymore.

Summing up, direct democracy is not an old-fashioned type of politics but an institution which makes the market for politics work more effectively. Of course, the beneficial effects of direct democracy do not only exist in theory, but are well documented in empirical work (see, e.g., Frey 1994; Eichenberger 1999; Kirchgässner et al. 2001; Funk and Gathmann 2009; Blume et al. 2009). Above all, direct democracy leads to sounder fiscal politics with lower deficits and less debts, it constrains the size of the government (e.g., Freitag et al. 2003), it makes government provide its services more effectively (e.g., Pommerehne 1983), it supports economic activity and thus the level of GDP (e.g., Feld and Savioz 1997) and it prevents centralization (e.g., Eichenberger 1994; Feld et al. 2008).

11.5.1.2 The Benefits of Federalism

There is a huge literature on the economic theory of federalism which discusses the specific advantages of federalism (see, e.g., Oates 1999). It emphasizes that federalism in the sense of granting fiscal autonomy to subnational units strengthens interjurisdictional competition and fiscal equivalence. Both these mechanisms accentuate the constraints and incentives of the local political decision makers, i.e. the citizens and the politicians, to pursue sound policies (see also Chap. 6). Because the respective arguments are well known, we will concentrate on three aspects which have so far not been adequately dealt with in the literature.

First, the message of the literature on yardstick competition cannot be taken too seriously. Federalism provides the political decision makers, i.e. the citizens and the politicians, with good opportunities to learn from other jurisdictions (see Salmon 1987; Besley and Case 1995). However, from such a learning perspective Switzerland is even more “federalistic”. It is not only highly federalistic itself but it is also part of the highly decentralized German speaking area. Unlike other linguistic areas the German area is divided in five fully independent countries (Germany, Austria, Switzerland, Liechtenstein and partly Luxemburg) between which competition is more intense, and learning opportunities are more widespread than between countries with different languages. Between these countries, mobility of factors of production is higher and information on new problem solutions can be communicated more effectively. Actually, the German speaking area is much more decentralized than, e.g., the Italian and the French ones. In Europe, it is the second most decentralized linguistic area with five independent countries per about 95 million German speaking citizens, shortly after the Scandinavian area with three independent countries per less than 20 million citizens. Moreover, Switzerland is also part of the French and the Italian linguistic areas and thus gets even more impulses from abroad. Consequently, in Switzerland the opportunities to learn from other local jurisdictions and from other countries are far better than in most other countries.

Second, federalism protects the currently living generation against overexploitation by redistributive policies. When taxes increase, the taxed subjects need time to adapt their level of economic activity as well as their efforts to minimize the tax burden. In the short run, governments therefore usually benefit from increasing tax rates. But in the longer run tax income may decline due to the tax-minimizing reactions of the taxpayers. Such overtaxation is more likely in centralized countries. There, shortsighted tax increases induce factors of production to flow out to foreign countries, i.e. from a national perspective they get lost. In contrast, in a federalistic country, overtaxed subjects do not have to resort to foreign countries but can reduce their tax burden by moving to a low tax jurisdiction and, thus, stay within the country. While elasticities of tax income to tax rates are generally larger, the difference between the short and long run elasticities become smaller. Thus, overtaxation becomes less likely which brings about higher long run tax income to the government.

Third, federalism is also a protector of future generations (Eichenberger and Stadelmann 2010b). As it is well known from taxation theory (Blankart 2011), taxes are shifted to the production factors according to the relative price-elasticities of their supply. In a highly decentralized country such as Switzerland, labor is highly mobile between jurisdictions. Thus, taxes are shifted to a large extent to the only immobile factor, i.e. land. As a consequence, the debt burden has not to be carried by future generations of workers via higher future taxes, but the taxes and the debt capitalize into property prices and have, thus, to be carried by present property owners. In contrast, in a large centralized country, future workers cannot easily evade taxation, which implies that they have to carry large parts of the debt burden. Thus, the incentives of the present generations to opt for debts instead of taxes to finance government spending are muted at the subnational levels of decentralized countries.

Summing up, the federalistic multiplicity and variety of decentralized institutions that may look so chaotic to outside observers is no disorganized system, but it makes the market for politics more competitive and effective by establishing inter-jurisdictional competition. It provides opportunities to learn from the problem solutions of other jurisdictions, and it protects the citizens from being exploited by short-sighted governments or democratic majority decisions. Of course, these are exactly the properties needed for a safe haven to be successful (see also Chap. 5), and they are an essential determinant of the high level of welfare in Switzerland.

11.5.1.3 Federalism and Direct Democracy Bear Other Successful Institutions

According to the above discussion, the institutions of direct democracy and federalism both make not only the political authorities cater more closely to the preferences of the citizens but also the citizens to demand sound fiscal policies. With respect to the present financial and economic crisis it can be argued, firstly, that Switzerland was successful in fighting the crisis because at its outbreak in 2007

Switzerland had a good capacity to stand the crisis as it had low debts thanks to sound fiscal policies in the early 2000s owed to federalism and direct democracy. Secondly, federalism and direct democracy made it unattractive or even impossible to politicians to launch old-fashioned Keynesian stabilization programs. To subnational jurisdictions, stabilization politics is a public good. In contrast, the federal government of Switzerland has no extended competencies to spend money, and the time lags involved with government spending programs are too long in order to make active stabilization policy an attractive field for the federal government. Actually, in 1975 the federal government and parliament tried to get more competencies to pursue active stabilization policies, which was rejected in a referendum.⁴

Against this positive view of direct democracy and federalism it is often argued that it was neither direct democracy nor federalism but four other institutions which were responsible for the good performance of Switzerland during the crisis: the federal debt brake, the independent central bank, the flexible labor market, and Swiss culture with high tax moral and work ethics. However, the important point here is that these institutions have been either introduced or not undermined due to federalism and direct democracy.

Actually, at the federal level the debt brake has only been introduced after many cantons did so before. The positive cantonal experience with debt brakes was an important ingredient in the public and political debate leading to the federal debt brake and its huge success in the respective popular vote (Bundesrat 2000). Interestingly, Germany was the first country to copy the Swiss debt brake, which also speaks in favor of the idea that countries learn more swiftly from countries of the same linguistic area. Of course, we should note that there are also many other institutions which were introduced at the federal level only after they had been successfully implemented at the cantonal level. A case in point is the new incentive-focused fiscal equalization scheme which has been implemented in 2008 only after all cantons had redesigned their equalization schemes in order to give more weight to economic incentives, and after the experience with these new cantonal schemes have been positive.

With respect to the independence of the central bank similar arguments apply. A relatively extensive independence was granted to the central bank in 1905 when it grew out of a system of cantonal and private 'emission banks' which were appointed by the federal government to emit banknotes. The cantons as the owners of the old banks had an important say in whether the new national bank should become more or less independent of the central government. As the cantons were to lose less influence relative to the central government if the central bank was an independent body a majority of the parliamentarians voted in favor of this model. The same mechanism also worked at the European level where the national governments agreed to found a new and independent central bank, the European

⁴The Keynesian government proposal got a slight majority of the population (52.8 %) but no majority of the cantons.

Central Bank (ECB). If Europe had been a centralized country, it is unlikely that its leading politicians would have delegated monetary policy to an independent body.

The flexible labor market is a result of all the laws and regulations which have been adopted or rejected in many referenda. Many of the laws proposed by the parliament or by initiative but which have been rejected by the voters would have implied a much stricter regulation of the labor market.⁵

Finally, Swiss culture is strongly dependent on federalism and direct democracy. An obvious case in point is high tax moral. As large parts of taxes paid by a citizen or a firm stay within the municipality where he or it resides, people have more effective incentives to pay taxes. They have decided themselves in a popular vote or in a town meeting on the tax law and the tax rates; they feel that their contribution matters for the sake of their municipality; by referenda and initiative they have an important say on how the tax money is spent; and all citizens of the municipality get an incentive to care for whether other citizens pay their share. Similar arguments are relevant to work ethics. As the social security net is to a large extent financed by the municipalities, not living at the expense of the social security net is not a national public good but a local public good. Thus, the citizens are interested in their fellow citizens working and doing well. Contrast this to a highly centralized system as it exists, e.g., in Greece. As all the tax money is going to Athens and all the subsidies are coming from Athens, paying taxes, not cheating on subsidies, and controlling for whether others are paying their share are pure national public goods which are most often not provided.

11.5.2 Rich Midsized Country: High Prices

Switzerland is rich, but why does it exhibit such a high price level? Other rich countries such as Denmark and Norway also suffer from high price levels. But there are also the USA and Luxemburg which have much lower price levels. The high income and productivity have countervailing effects on the price level. High income usually implies that hourly wages and thus costs are high, but high productivity means that only few hours are needed to produce a given product or service and, thus, costs are low. Consequently, it is not predetermined that income must be positively correlated with the price level. A clear positive relation will only be found for midsized countries such as Switzerland but not for very large and very small countries.

⁵The population rejected among others the following proposals to more tightly regulate the labor market: On 21.2.1976, the proposal by the government and parliament for "Mitbestimmung der Arbeitnehmer" (counterproposal to an even more regulative initiative) with 70.4 % of the votes; 11.3.2012, "Volksinitiative 6 Wochen Ferien für alle" (66.5 no votes); 3.3.2002, "Volksinitiative für kürzere Arbeitszeit" (74.2); 4.12.1988, "Volksinitiative zur Herabsetzung der Arbeitszeit" (65.7); 10.5.1985, "Volksinitiative für eine Verlängerung der bezahlten Ferien" (65.2); 5.12.1976, "Volksinitiative für Einführung der 40 Stunden Woche" (78.0).

In rich countries the purchasing power of consumers is higher than in poor countries. Therefore, producers would like to differentiate their prices between rich and poor countries, i.e. to get higher prices in rich than in poor countries, in order to skim the consumer rent. While the consumers try to avoid paying high prices by buying the goods in other countries, arbitrageurs try to make profit by buying goods in low price countries and reselling them in high price countries. However, these strategies only work effectively if the country is either small or the transaction costs to import goods are very low. Both characteristics apply to Luxemburg which is small and a member of the EU. Thus, most consumers could regularly go to Germany, France or Belgium in order to buy goods at lower prices, and importers can freely import goods from these countries. Therefore, it makes no sense for producers to set much higher prices in Luxemburg than in the neighboring countries. In contrast, Switzerland is a midsize country in which the majority of citizens lives too far away from the border to regularly go shopping in a neighboring country. Moreover, Switzerland is not a member of the EU and, thus, has some specific regulations with respect to goods and production standards concerning the environment, health and safety. Therefore, it is difficult for retailers to buy goods abroad and to import them into Switzerland. This applies especially to the large retailers which are in need of stable logistics and just in time supply of the goods they stock. Therefore they prefer to work with the producers or the 'official' importers which can guarantee prompt delivery.

Of course, this mechanism only applies to differentiated goods for which inter-brand competition does not necessarily lead to the normal market equilibrium. But as all branded goods are in some way differentiated goods, the effect is large. According to BAK (2010) the higher wholesale prices are the main reason for the high price levels in Swiss retail trade. In contrast, the high level of salaries does not play an important role as in Switzerland productivity is higher, nonwage labor costs are lower, and working hours are longer than in most comparable countries, thus inducing unit labor costs which are at or even below the German level.

11.5.3 Low Productivity and Low Growth

The huge difference between the high Swiss GDP at exchange rate and low productivity largely stems from the fact that productivity is measured by dividing GDP adjusted for PPP by hours worked. However, it is doubtful whether it makes sense to measure productivity this way instead of dividing current GDP at exchange rate by hours worked. Swiss firms which compete in the international market have to be competitive at current exchange rates but not adjusted for PPP. Obviously, Swiss firms are highly successful in doing so. Otherwise Switzerland would not be among the OECD-countries with the largest surplus in trade in goods and services. Actually, in 2011 Switzerland had according to OECD data a current account surplus of 10.4 % of GDP which is 2 % points more than the Netherlands and about the double of Germany and Denmark.

Moreover, in Sect. 11.3 of this chapter we have discussed several reasons why GDP adjusted for PPP gives a downward-biased picture of Swiss income. The same reasons lead, of course, also to a biased picture of Swiss productivity and economic growth.

But even if we use productivity as measured by GDP adjusted for PPP divided by hours worked, Swiss productivity is for several reasons much higher than what the international statistics show:

Swiss employment is affected by labor market institutions. Switzerland has much higher employment than most other countries. While the high employment rate leads to high GDP per capita and thus in some way to an upward push in the level of total income, productivity is downwards biased as the economic activities employing the relatively unproductive individuals affect GDP less than labor hours.

Swiss productivity is also affected by the Swiss educational institutions. Switzerland has a lower extent of schooling but a higher rate of vocational education than most comparable countries. In contrast to youngsters who are in a school or university apprentices are counted as work force and constitute about 5 % of it. As apprentices usually have a much lower productivity than fully trained workers official Swiss productivity data are again biased downwards.

Switzerland's economic structure is endogenous to the high salaries and high prices. Because opportunity cost of time are larger than in most other countries it is to be expected that Swiss citizens are more reluctant to go long ways for working and shopping, thus commuting times being shorter. Indeed, if one tries to assess Swiss productivity not simply by dividing total GDP by hours worked but by the sum of hours worked plus commuting time to work and shopping, Swiss productivity is about 10 % higher when compared, e.g., to Germany (see Schmid 2010).

Finally, we have once more to come back to Kohli's (2004) point that when inferring the Swiss growth rate from national data it is underestimated by about 0.5 % as the consumption value of Swiss GDP is steadily improving for the systematic long run improvement of its Terms of Trade (or, respectively, the appreciation of the real value of the Swiss Franc, see Chap. 2). According to the calculation in Borner and Bodmer (2004: 38) for the period 1970–2000 Switzerland was the only country for which the growth rate of the 'command GDP', which takes into account changes in the terms of trade by focusing on what the citizens can consume, was much higher than normal GDP which focuses on production. Swiss annual growth turned out to be 0.4 % higher per year with command GDP, while there was no other OECD country with a difference larger than 0.2 % (Canada). In contrast, for Denmark or the US the growth rate of the command GDP turned out to be 0.1 % lower than the growth rate of normal GDP. Of course, the effects of changing Terms of Trade are taken into account in comparisons using GDP adjusted for PPP as well as changes in PPP. But as the currently available growth data series do not use yearly PPP but refer to the PPP of a certain base year, the Terms of Trade effect also plays a role in these data series. This effect is responsible for the fact that Swiss growth rates often look bad (because current growth rates are not adjusted for the Terms of Trade effect and changing PPP) but that Switzerland is

nevertheless not falling behind in the long run (as international data are periodically adjusted to the changes in Terms of Trade and PPP).

But why is the Swiss economy the only one which is successful at always producing those export goods with increasing Terms of Trade? Of course, our answer is: institutions. Labor market flexibility, the Swiss education system with its high rate of vocational training instead of formal school education, the internationally open labor market for specialists, and the comparatively low taxation provides the firms with incentives and opportunities to react more flexibly to changing developments in the international market and to heavily invest in R&D which in turn increases flexibility and innovativeness even more.

To sum up: We have discussed several ways how to explain the puzzling discrepancy between high income and low productivity. It seems that the international statistical standard does not reflect Swiss productivity to its full extent. Moreover, it is also likely that Swiss growth rates are biased downwards by statistical effects. This already showed up in the study by Dewald (2002) who relies on a very long time series (see also Kohli 2004). Analyzing the economic performance of 12 countries for the period 1880–1995 he finds that Switzerland achieved only the second-last rank with respect to real per capita growth. However, Switzerland managed to be one of the richest countries in the world in 1995. Therefore we concentrate in the following not on how to improve Switzerland's seemingly weak short run growth performance but on how to preserve its obviously very high income and good long run performance.

11.6 Future Developments

The future world is full of challenges. We discuss the ones often mentioned in public debates, provide our assessment and propose solutions.

11.6.1 Globalization

Many people judge globalization and the rampant economic growth in the large former developing countries to endanger Switzerland's economic position. Indeed, the world will look different if the economies of China, India, Brazil, Indonesia, Malaysia, etc. keep on growing. From a theoretical perspective the effects of the growing incomes of these countries on Swiss welfare is highly complex. It mainly works via four channels: (1) These economies will increasingly flood Swiss markets not only with cheap products but also with products of reasonable or even high quality. (2) They are developing into important export markets for Swiss products. (3) They will increasingly compete with Swiss exporters on other export markets. (4) They will demand a larger share of the scarce resources. It seems to be impossible to assess the total effect of these four elements. However, the simplest

way to grasp it is by looking at close analogies. Think for example of whether Switzerland would be better off if Japan had not become rich. Or go even one step further and imagine that the US is developing into a poor developing country. Would this be good for the Swiss economy? Then the US would not supply Switzerland with nice i-phones and i-pads anymore, US consumers would not buy so many Swiss watches anymore, they would not compete with Swiss firms on the world market anymore, and they would not consume so much scarce resources anymore. Interestingly, almost nobody would argue that an impoverishing US is good for the Swiss economy. Quite to the contrary: It is obvious that this would be an economic disaster not only for Switzerland but for all developed economies. The reason is simple. We all benefit much more from the interaction with rich than with poor economies, i.e. the sum of the above mentioned effects is clearly positive. Therefore, it is also good for us when the formerly poor countries become rich. There is only one caveat. If they compete very successfully in the world market and crowd out our products, i.e. when our Terms of Trade deteriorate, the aggregate effect could be negative for our economies. However, while this can plausibly happen to countries with medium income like Portugal or some East European countries, Switzerland will be the last country suffering from being crowded out by newly developing countries for several reasons:

As already discussed the Swiss economy seems to be exceptionally flexible with respect to adapting to changing conditions in the world market. Otherwise it could not be the only economy which exhibits a much higher growth rate for Command-GDP than for normal GDP (Kohli 2004), and the Swiss Franc could not have been appreciating at an exceptional pace without severely hurting the economy and the export industry. The reasons for this high adaptability are the highly flexible Swiss labor market, the vocational training which guarantees that the youngsters learn the most up to date techniques, and the large R&D expenditures. As the many competitiveness and innovativeness indices show the Swiss economy is not only highly competitive but also innovative. According to the well known competitiveness indices by IMD and WEF it is the most competitive European economy, and according to patent data (patents per inhabitant) Switzerland is leading in Europe with respect to innovativeness.

Finally, the economy is sheltered from exogenous shocks by the fact that Switzerland is one of the last midsize countries with its own currency which usually floats freely. As the Euro crisis again has shown having an independent currency is a highly valuable asset when having to accommodate to exogenous shocks.

11.6.2 Sustainability of Social Insurance

Most countries suffer from high implicit government debts as well as from implicit private debts because the future old age pensions have to be paid from the future government budget and from the profits of private firms. In contrast, due to the