Switzerland's Growth Challenge

Ulrich Kohli

Chief Economist

Alternate Member of the Governing Board

Swiss National Bank

Paper prepared for presentation at the

Osec Business Network Switzerland Podium

Zurich, December 7, 2005

1. Switzerland's growth deficit

For the past quarter of a century, Switzerland's growth rate has been exceedingly low. Switzerland regularly shows up at the bottom of international rankings. In fact, according to the OECD, it has now been passed by Ireland in terms of real income per capita. It has been said that if current trends continue, Switzerland will eventually become one of the poorest countries of Western Europe. According to a recent report, Switzerland is less competitive than Hong Kong and Singapore. For some analysts, Switzerland has been in a great depression for the past thirty years. Its productivity is said to be falling. Switzerland has the reputation of being a high-price island, so that its apparently high income level might be just an illusion.

These assessments are worrisome, to say the least, for growth is essential to satisfy the expanding needs and aspirations of the population. Even in Switzerland, there are pockets of poverty, with many households struggling to make ends meet, and growth is the best way to bring about an improvement in everyone's living standards. Moreover, we must bear in mind the ageing of the population. Irrespective of how future pension benefits will be financed, it is vital that the consumption needs of coming generations, whether working or retired, be met as fully as possible. This requires that the size of the national economic pie be maximised.

While the situation is alarming and needs to be urgently corrected, it is essential to remain credible if one expects one's recommendations to be taken seriously. Yet some of the more sensational declarations that have been made are hardly tenable, at least not without serious qualifications. So let us have a brief look at the evidence.

_

¹ OECD Bulletin (2005).

² J.-D. Gerber in *NZZ am Sonntag*, January 30, 2005.

³ IMD World Competitiveness Yearbook 2005.

⁴ T.J. Kehoe and E.C. Prescott "Great Depressions of the 20th Century", *Review of Economic Dynamics* 5 (2002) 1-18; T.J. Kehoe and K.J. Ruhl "Recent Great Depressions: Aggregate Growth in New Zealand and Switzerland", *New Zealand Economic Papers* 37 (2003) 5-40; T.J. Kehoe and K.J. Ruhl "Is Switzerland in a Great Depression?", *Review of Economic Dynamics* 8 (2005) 759-775.

⁵ Département fédéral de l'économie (2002) "Le rapport sur la croissance", *Grundlagen der Wirtschaftspolitik* Nr. 3F, p. 21.

⁶ See "Tagung Hochpreisinsel Schweiz", seco, July 1, 2003.

⁷ U. Kohli "Le coût réel de la sécurité sociale" paper presented at the *Schweizerische Gesellschaft für Konjunkturforschung*, May 15, 1997.

2. Switzerland's growth paradox

Switzerland seems to be going slower than anybody else, and yet in terms of standards of living it stays in the lead pack. How can that be? In my opinion, part of the answer to this paradox has largely to do with measurement issues. I have argued elsewhere that when it comes to Switzerland, real gross domestic product (GDP) growth is a poor measure of economic performance, and this for a number of reasons.8 First, real GDP figures do not take into account terms-of-trade improvements. An improvement in the terms of trade is like a technological advance: one gets more for less, and it unquestionably raises a country's real income. Of all the countries in the OECD, Switzerland has experienced the largest improvement in its terms of trade – about 25% – over the past quarter of a century. Yet this is unaccounted for by real GDP. Second, GDP does not take into account the net income from abroad. Here, too, is Switzerland an outlier, with its gross national income (GNI) growing significantly more rapidly than its GDP thanks to its huge investments abroad. In 2004, GNI exceeded GDP by 8.3%; ten years ago, the difference was merely 3.3%. Another issue has to do with the fact that GDP figures do not fully take into account the services produced by public and club goods. Switzerland invests unusually large amounts in its public infrastructure and in the protection of the environment. Such investments mobilise considerable quantities of resources that could be used elsewhere. They presumably raise Switzerland's economic welfare, but they have little impact on its measured output potential. I should also mention that there are some technical issues regarding the choice of a functional form for index numbers that come into play. 9 These and other reasons lead me to conclude that Switzerland's real income growth broadly defined is being significantly underestimated by real GDP. After all, Swiss cities regularly end up at or near the top of the Mercer quality of city life reports. For whatever such international rankings might be worth, it suggests that Switzerland is doing something right after all.

2

⁸ U. Kohli "Real GDP, Real Domestic Income, and Terms-of-Trade Changes", *Journal of International Economics* 62 (2004), 83-106; U. Kohli "Wachstumsschwäche der Schweiz: Möglichkeiten und Grenzen der Geldpolitik", paper presented at the *Verband akademischer Volks- und Betriebswirtschafter*, Zurich, January 20, 2004; U. Kohli "Switzerland's Growth Deficit: A Real Problem, But Only Half as Bad as it Seems" in L. Steinmann and H. Rentsch (eds.) *Diagnose: Wachstumsschwäche* (Verlag Neue Zürcher Zeitung: Zurich) 2005.

⁹ U. Kohli "An Implicit Törnqvist Index of Real GDP", *Journal of Productivity Analysis* 21 (2004) 337-353; U. Kohli "Inexact Index Numbers and Economic Monotonicity Violations: The GDP Price Deflator" prepared for the *SSHRC International Conference on Index Number Theory and the Measurement of Prices and Productivity*, Vancouver, B.C., June 30–July 3, 2004.

¹⁰ It is sometimes thought that while Switzerland's income is falling behind, the Swiss people do not notice it because their wealth remains extremely high. This explanation is not convincing, for the return from wealth must also be incorporated in any comprehensive definition of income.

3. Low competitivity?

Is Switzerland really less competitive than Singapore and Hong Kong? Quite frankly, I do not find competitiveness a very meaningful concept when applied to nations. A firm or an industry needs to remain competitive, otherwise they would decline in size and eventually die out. Nations do not die out, at least not of economic causes. As elementary trade theory teaches us, every country has at least one comparative advantage. All countries survive trading in world markets at world prices. In that sense, they all are competitive. Of course, some countries are more successful than others, be it because of their factor endowments, their access to technology, or their institutions. Such countries have a higher income. It turns out that Switzerland's GDP per capita at market exchange rates exceeds that of Singapore's by 92% and that of Hong Kong's by 102%. Even at PPP exchange rates, the differences are not trivial (16% relative to Singapore, and 6% relative to Hong Kong). By this yardstick, Switzerland is clearly more successful than Singapore and Hong Kong. Admittedly, one can always do better, and there are many areas where there is room for improvement. I will get back to this in what follows.

4. Low productivity?

Swiss growth fell quite dramatically in the 1990s. In spite of my earlier reservations, let me use real GDP as a yardstick to measure Switzerland's performance, since the data are readily available and widely used. As shown by Table 1, real GDP growth averaged 1.6% between 1981 and 2000. For the first part of this period, from 1981 to 1990, growth averaged 2.2%. For the second sub-period, from 1991 to 2000, it fell to 1.0%, barely keeping up with population growth. The 1990s can thus be viewed as a lost decade in terms of growth.

Table 1
Decomposition of real GDP growth, 1981-2000

	1981-2000	1981-1990	1991-2000
Real GDP	1.6%	2.2%	1.0%
Labour	0.1%	0.5%	-0.2%
Capital	1.0%	1.2%	0.8%
TFP	0.5%	0.4%	0.5%

What are the reasons for this dismal performance? It is sometimes argued that the answer lies in the decline of Swiss productivity. Productivity is difficult to measure, both over time

and over space. Nonetheless, let us look at the best concept available. The most encompassing measure of productivity changes is what economists call *total factor productivity* (TFP). TFP captures the effects of technological and institutional changes. An improved technology, a better educated and healthier labour force, more competition, a better infrastructure, better institutions, and fewer administrative impediments are all conducive to higher TFP.¹¹ As shown in Table 1, there is no evidence that TFP fell in the 1990s. On the contrary, it increased slightly to contribute about 0.5% to the annual growth of real GDP. Table 1 also shows the growth contributions of the accumulation of capital and labour. It is striking that the contributions of both factors fell dramatically in the 1990s, from 1.2% to 0.8% as far as capital is concerned, and from 0.5% to -0.2% for labour.¹² Thus, it appears that the Swiss economic slowdown is mostly due to a fall in private domestic investment and a decline in work effort.

While TFP is the productivity measure favoured by economists, the popular debate generally focuses on *labour productivity*. Here one must distinguish between *average* and *marginal* labour productivity. Headline figures typically refer to the former, whereas from an analytical viewpoint, it is the latter that is the more relevant. In equilibrium, the marginal product of labour must equal the real wage. Thus, considering the high level of Swiss real wages, one must conclude that the marginal product of labour in Switzerland is indeed very high, and rising. This is not surprising considering that most Swiss labour is skilled and that capital intensity is high. What about the average productivity of labour? I must admit, I do not view average labour productivity as a very useful concept, given that it essentially relates output to just one input, namely labour, overlooking the contributions of technological change (i.e. TFP) and of capital. Nonetheless, if we look at the figures shown in Table 2, we see that average labour productivity, far from declining, has actually increased, from a yearly average of 1.2% to 1.4%. Thus, there is no evidence that average labour productivity has fallen dramatically, at least not over the past two decades.

_

¹¹ At the same time, it must be remembered that TFP is measured as a residual. Better data and smaller measurement errors are likely to reduce TFP.

¹² These figures are based on K.J. Fox and M. Zurlinden "On Understanding Sources of Growth and Output Gaps for Switzerland" (2005), unpublished, and U. Kohli "Labour Productivity vs. Total Factor Productivity", *Irving Fisher Committee Bulletin* (2005). All estimates are computed as Törnqvist indices.

¹³ Explaining output growth by compounding the increase in employment and the rate of change in average labour productivity, as it is often done, is almost tautological. This procedure is all the more questionable because an increase in employment would, *ceteris paribus*, reduce the average productivity of labour. Note also that one could equally well "explain" output growth by considering the rate of growth of the capital stock and the average productivity of capital, or do the same for any other input, for that matter.

¹⁴ This may appear quite modest compared to headline data reported for the United States, for instance. However, it must be remembered that, even though the recent US performance has been nothing short of stellar, US headline figures typically relate to the non-farm, private business sector. That is, household production and government, where productivity gains are either low or ruled out by construction, are left out.

In fact, even the decomposition of average labour productivity has remained little changed during the past quarter of a century, with about two-thirds due to capital deepening and one-third to TFP.

Table 2
Decomposition of average labour productivity growth, 1981-2000

	1981-2000	1981-1990	1991-2000
Av. labour productivity	1.3%	1.2%	1.4%
Capital deepening	0.9%	0.8%	1.0%
TFP	0.5%	0.4%	0.5%

5. High-price island?

Switzerland has the reputation of being a high-price country. To some extent, the high prices we pay for the goods and services we consume reflect a lack of competition, rigidities, administrative hurdles, and inefficiencies that afflict our domestic market. I will return to this issue shortly. By and large, however, the high prices that we face reflect the high wages that we enjoy. Our country is well endowed with capital and scarce in labour and land. Consequently, returns to capital are relatively low and real wages are high by international standards. Land is relatively expensive, too. As mentioned earlier, the high level of wages in Switzerland reflects the high value of the marginal product of its workers. To be sure, there are some activities where productivity is no higher than in the rest of the world. These are typically highly labour intensive, non-traded services, such as haircuts. Given our high wages, this translates into relatively high prices for these products. There is no way around it, though, at least not as long as we expect these services to continue to be offered in Switzerland. Given current technology, it would be most inconvenient and prohibitively expensive to travel to Portugal or Indonesia every time one needed a haircut. Nonetheless, the traded component of what we consume – except for agricultural products - is hardly more expensive than in the rest of the world. Our high wages therefore still imply a comparatively high purchasing power. This is for real, it is not an illusion.

Deregulation, more competition, globalisation and technological progress will lead to adjustments in relative prices, and to a more efficient utilisation and allocation of resources. Our purchasing power will increase further, together with our real income. What impact this evolution might have on the price level is unclear, however, and indeed quite

¹⁵ A recent study by PricewaterhouseCoopers looking at the prices of new cars in a sample of 19 European countries finds that they are lowest in Switzerland.

irrelevant. The price level *per se* is a quite meaningless concept: it cannot be assessed *in abstracto*, i.e. independently of wages, the exchange rate and monetary conditions in general. Ultimately, it is the course of monetary policy that will shape the path of the price level. Some voices have been heard calling for a drop in all prices, including wages, in Switzerland. Even if such a drop could somehow be engineered (what happened to yesterday's fears about deflation?), it would have little real impact, since the price of foreign exchange would most likely fall in the same proportions, leaving the *real* exchange rate – the only one that matters – unchanged, and still leaving us under the impression that Switzerland is a high-price country. As a first approximation, such a development would have no real impact. A closer look, though, would reveal a potentially damageable side effect, namely an arbitrary redistribution of wealth from debtors to creditors.

6. What went wrong?

While the sky is not falling just yet, there is no denying that our growth deficit is real and needs to be rectified. What went wrong over the past couple of decades? Most economists would argue that our problems are structural, rather than cyclical. Admittedly, demand factors do matter as well, particularly in the short run. The 1990s have witnessed a number of shocks that have had a negative impact on activity and on capital formation in Switzerland. Without going into the details, one can mention here the restrictive monetary policy of the early 1990s that was made necessary by the rise in inflation in the late 1980s; the bursting of the housing bubble that had a adverse impact on household consumption, on construction and on financial intermediation; the unrelenting increase in health insurance premiums, which has severely amputated disposable income and penalised consumption; the burden of German reunification and the restrictive European fiscal policies in a struggle to satisfy the Maastricht criteria that impacted negatively on Swiss exports. While every period brings its share of positive and negative shocks, it seems that the 1990s were characterised by an unusual string of bad luck.

There is little doubt, though, that in the longer run, it is the amounts of resources mobilised and the available technology that shape the growth path of an economy. As Table 1 indicates, the 1990s were characterised by low contributions of capital and labour. Private domestic investment was low, and the number of hours worked actually fell. How can that be? In my view, the main reason why employment growth stagnated during the 1990s is that a great deal was done to discourage work and encourage inactivity. Payroll taxes, such as unemployment and disability insurance levies, which have been raised repeatedly

over the past several decades, act as a burden on work effort. Increased benefits, on the other hand, tend to subsidise inactivity. Proposals aired during the 1990s aimed at reducing the length of the working week or lowering the retirement age also contributed to conveying the fallacious notion that working less would actually be wealth generating.

As for the reduced level of domestic investment in the 1990s, I see two possible although not mutually exclusive - causes. First, the investment climate did deteriorate, with little impetus coming from the employment front, and with Switzerland probably gradually falling behind in the global race towards more competition and less regulation. This too is worrisome. Second, and this is not necessarily bad, European integration and globalisation have most likely led to a reduction in the home bias. Swiss investors have therefore become more comfortable investing abroad. Given the relative abundance of capital in Switzerland, which translates into modest returns to capital and low real interest rates, capital has flown out of Switzerland as testified by our huge current account surplus. I would argue that it makes perfect sense for Swiss firms and households to invest in countries where capital is relatively scarce and labour relatively abundant (and relatively young). The return to investments would be higher there than in Switzerland, and this would make a positive net contribution to Swiss national income. True, investments abroad to do not create any jobs in Switzerland, nor do they raise Swiss labour productivity. Given that we are close to full employment, though, the job argument carries little weight. According to some estimates, Swiss firms employ 1.8 million people abroad. Needless to say, it would be unfeasible to fill that many extra positions domestically. As for labour productivity, this discussion demonstrates once more that what is important is income, rather than output. One might also object that social security taxes are typically levied on labour income, and thus investments abroad creating jobs in foreign countries do not contribute to the Swiss social safety net. While few additional jobs would be created domestically, it is true that forcing investments to be made in Switzerland rather than abroad would raise the marginal product of labour, real wages and social security contributions, just as it would also depress the return to capital. Higher wages would call for higher pension benefits, however, so that the net effect on the social security system would essentially be nil; while investing capital where it is less productive would lower national income and this would be counter-productive.

7. What is to be done?

The solutions to our problems are simple: one must mobilise all possible factors of growth and use them efficiently. The main growth engines are labour and capital, technological progress and international trade. To make the best possible use of these, the key is to avoid distortions, artificial hurdles and disincentives.

As far as labour is concerned, one must encourage activity and discourage inactivity, rather than the reverse. Regulations that prevent workers from working as much as they please, for as long as they want or whenever they wish ought to be revoked. Distortions that inhibit the hiring of older workers must be eliminated. More day schools would encourage labour force participation. Labour mobility, which is an essential element for the efficient allocation of resources, must be promoted. This might require a wide range of measures, such as harmonising the inter-cantonal school system or reducing real estate transaction fees. Labour mobility could also be enhanced by a reform in our pension system. The free selection of a pension fund would allow workers to switch jobs without changing pension schemes, and vice-versa, thus giving them more freedom and flexibility. Indeed, there is no reason why the choice of employment should be linked to the choice of the provider of a financial service. Elementary portfolio theory teaches us that it is unwise to invest one's two largest assets (human capital and pension capital) in more or less the same institution. Furthermore, a system of widespread, transparent, individual pension accounts might do much to incite workers to increase their work effort.¹⁷

The tendency to tax work effort and subsidise inactivity is reflected by the very substantial increase in the size of the public sector that has taken place since the late 1970s. The sum of government purchases and transfers has grown enormously. In fact, of all the OECD countries, it is Switzerland that has experienced the largest increase in the public sector share over the past couple of decades. In view of the negative correlation that exists between real growth per capita and the *increase* in the size of the public sector, our poor

1

¹⁶ While this proposition might seem perfectly obvious to most economists, it is not always well understood by the population at large, where fallacious notions (such as that older workers must make room for younger ones, that investment and technological progress cause unemployment, and that international trade exports jobs to the rest of the world) often prevail. Such thinking reveals a serious and worrisome deficiency in economic literacy.

¹⁷ U. Kohli "L'impact économique de la sécurité sociale", in *Fünf Expertenberichte zur Dreisäulenkonzeption der Schweizerischen Alters-, Hinterlassenen- und Invalidenvorsorge* (Berne: Département fédéral de l'intérieur) 1991.

¹⁸ Public expenditure is a better gauge of the ascendancy of the public sector than current taxes would be, since it is the spending that means that resources are being absorbed or diverted, and since expenditure must necessarily be fully financed, either by taxes now, or by taxes later.

performance should probably not come as a surprise. 19 Within Europe, Switzerland has long been an outlier when it comes to the size of its public sector. This is no longer true. If one adds up the spending on all levels of government, the social insurances (including health insurance and compulsory pension schemes), and the public enterprises (the utilities, the railways, the post office, etc.), one is not far off 50% of GDP.²⁰ In fact, if one refers to nominal *net* domestic product, which is a better measure of domestic net output, the 50% mark is probably already breached. Thus, just about every second franc that is spent in Switzerland transits through, is diverted by, or is regulated in some way by the public sector. When the allocation of resources no longer responds to economic forces it tends to become inefficient. Some might object that it is misleading to include the railways, the post office or public television in the sphere of government, since in some countries these are part of the private sector. This is precisely the point, though: in Switzerland, they are not.

Besides inducing an inefficient allocation of resources and thus holding back productivity. the rapid growth in the public sector has also had a direct, negative impact on the measurement of TFP and average labour productivity. Indeed, since output is conventionally measured by input when it comes to the government sector, productivity gains are ruled out by construction, which weighs negatively on the average productivity performance of the economy as a whole.

The lack of competition in many sectors of the Swiss economy is often cited as one of the main causes for Switzerland's lacklustre growth performance. Sheltered industries are not inclined to increase their productivity. Too many regulations, restrictions and domestic barriers to internal trade take their toll. Administrative hurdles use up valuable resources and create distortions. There seems to be no end to Swiss creativity when it comes to devising exotic taxes and duties. Some new levies are probably on the drawing board as we speak. More competition and less red tape would not only contribute to increasing TFP, but it would also make Switzerland as a business location more attractive to investors and stimulate domestic capital formation, thereby yielding a double dividend.

Finally, international trade provides a formidable lever, thanks to which a country can transform the products for which it has a comparative advantage into those for which it does not. I have already mentioned the improvement in the terms of trade that Switzerland

U. Kohli "Le véritable impôt", University of Geneva, 1999.
 U. Kohli "La montée des dépenses publiques en Suisse", University of Geneva, 1998.

has enjoyed over the years. This did not just happen by accident: it is a mark of the success of the Swiss export industry. As all the Osec members in this audience well know, relentless efforts go into the search for new markets and into the development of new products. These efforts must continue. Globalisation and the increased fragmentation of production made possible by technological progress offers new opportunities. Switzerland must resolutely embrace free trade. In international trade rounds, negotiators often demand "concessions" from the other parties. This ignores the fact that, for a small open economy, free trade – even unilateral free trade – is first best. In this sense, adopting the "cassis de Dijon" principle would do much to stimulate our economy and raise our real income. It is also essential that the Doha round of trade talks be conducted to a successful conclusion.

The federal government recently launched a 17-point programme devised to revitalise the Swiss economy. It is very broad in scope, including measures in the areas of education, health, the domestic market, competition, public finance, agriculture and immigration. This initiative is to be applauded and needs to be supported. Some of its measures have already been implemented. If all of them are eventually put in place, it will do much to increase the efficiency of the Swiss economy and to raise TFP. For the programme to be effective, however, it is important that it be viewed as a whole package that must not be unbundled, rather than as a menu from which a few individual items can be picked according to one's taste.

8. Will Switzerland win?

Switzerland is facing many economic challenges. The march towards a single European market, European Union (EU) enlargement, and globalisation, with the economic integration of many additional countries, have given rise to many new opportunities and have led to profound changes in relative prices. These price changes require quantity adjustments. Comparative advantages may shift, some industries may decline, and others will prosper.

These changes create both opportunities and risks for Switzerland: opportunities to further exploit our comparative advantages and to reap the benefits from the fragmentation of production and expanded international trade. Many of the required adjustments will be difficult and painful, though. The benefits will only be felt over time, but the pain is immediate. The risk therefore arises that these adjustments will be resisted. If the

necessary changes in relative prices and wages are not allowed to take place, and if the reallocation of resources is hindered, some new equilibrium will emerge nonetheless, but it will be an unattractive one for us: one with more distortions, less income and fewer prospects. Will Switzerland win? It is up to all of us to answer this question and to decide whether we want a 21st-century income, or whether we are content with an income level from the past. As far as I am concerned, I am very bullish about Switzerland!