BANKING IN SWITZERLAND

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PED-329, Microeconomics of Competitiveness

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1. COUNTRY CONTEXT

1.1. Geography and population

Switzerland is one of the richest and most developed countries in the world. Located in Western Europe and mostly covered by the Alps, it is landlocked and bordered by Germany in the north, France in the west, Italy in the south, and Austria and Liechtenstein in the east. Its total area is 41,285 sq. km.

Its population is 8.4 million and multilingual. The four national languages are German (64% of the population), French (20%), Italian (7%), and Romansh (less than 1%). 23% of the population are foreigners with Swiss permanent residency. 74% of the population live in urban areas. Largest cities include Zurich, Geneva, and Basel. The federal government resides in Bern.

1.2. Historical overview

Switzerland is a federal republic consisting of 26 cantons. Switzerland's neutrality and independence from the Holy Roman Empire was recognized by European powers under the Peace of Westphalia in 1648. These political settlements were reaffirmed at the Congress of Vienna in 1815. The modern Swiss state was founded in 1848. The constitution was influenced by the ideas of the American and French Revolutions, and had significant provisions for direct democracy. It has nevertheless joined the United Nations in 2002.

Switzerland is also a proponent of free trade, and has been a member of GATT since 1961 and a member of WTO since its founding in 1995. It is one of the original members of the European Free Trade Area. Moreover, Swiss laws are increasingly harmonized with the European Union regulations and the country has signed many bilateral agreements with the EU. It has also joined the Schengen Area, but has not applied for the EU membership. Finally, Switzerland is home to a number of international organizations, including the WTO, the World

Economic Forum, the Bank for International Settlements, the UN Office in Geneva, FIFA, and the International Olympic Committee (Encyclopædia Britannica).

1.3. Gross Domestic Product, Labor, and Employment

The total GDP of Switzerland is equal to CHF 647 billion (around USD 700 billion) in nominal terms, making it the 20th largest economy in the world (World Bank). Since 2000, the average annual GDP growth rate has been 1.9% (Exhibit 1), which is faster than the growth rates in Germany, Austria, and France (1.3%), but slower than in Singapore (5.5%). In PPP terms, the GDP per capita is USD 62,557, which is 4th highest per capita income in Europe and 10th highest in the world. Excluding hydrocarbon-rich economies, micro- and city-states, Swiss per capita income is second highest in the world after Ireland (Exhibit 2).

Swiss economy is mostly driven by services: they account for 73.9% of GDP, followed by industry (25.5%) and agriculture (0.6%). A more detailed sectoral breakdown of GDP reveals that manufacturing accounts for 18% of the gross value added, trade – 14.4%, financial services – 5.1%, and insurance – 4.5%. Financial services have been experiencing fast rates of growth before the early 2000s recession and the 2008 global financial crisis. In the aftermath of these crises, share of finance in the economy shrank (**Exhibit 3**). Since 2000, the average growth of the financial services sector has been 0.8%. In contrast, the average growth rate of the manufacturing sector in the same period was 2.2%.

International Cluster Competitiveness Project identifies the following key export sectors in Switzerland: biopharmaceuticals, jewelry and precious metals, financial services, business services, and medical devices (**Exhibit 4**). Switzerland's average world export share in the 2000s was 1.64%. Its world export share grew on average by 0.11%. Biopharmaceuticals and business

services have been gaining shares, whereas jewelry and financial services have been shrinking relative to the global exports.

Switzerland has a highly-educated labor force, and enjoys a high labor force participation and low unemployment rates. A third of the labor force are foreign nationals with permanent residency in the country. Around 5% of the labor force is employed in finance and insurance (Exhibit 5).

It is no surprise that in light of its highly-developed economy, Switzerland also ranks high in broad measures of social development, such as high life expectancy, large expenditure on health and education, and low infant mortality rate (**Exhibit 6**). Literacy rate is nearly 100%, and 25% of the adult population holds a university degree.

1.4. Current Macro Dynamics

The public debt in Switzerland is quite low and stands at 34.1% of GDP as of 2016. The government has been running small budget surpluses of 0.2-0.3% of GDP for the past decade. The government is required to conduct countercyclical fiscal policy by law.

While Switzerland has few fiscal worries, on the monetary front it faces a number of challenges. Global demand for safe haven assets have put pressure on the Swiss Franc. In January 2015, the Swiss National Bank (SNB) abandoned the currency ceiling of CHF 1.2 for €1 and allowed the Franc to appreciate dramatically. In one month, the Franc was trading at CHF 0.98 for €1, raising fears that the Swiss export sector might lose competitiveness (Exhibit 7). After abandoning the currency ceiling, the SNB switched its focus to keeping negative interest rates between -1.25% to -0.25%. This is done to deter further capital inflows and additional appreciation of the currency. While the attractiveness of Swiss financial assets is a welcoming news for commercial banks, the SNB might be incentivized to limit capital inflows in the future

by further cutting the interest rate. Switzerland has had low inflation in the past, and currently it stands at only 0.57%, which is one of the lowest rates in the world (Economist Intelligence Unit).

1.5. National business environment

Switzerland has an extremely competitive national business environment, as evidenced by its number one ranking in the 2016-2017 Global Competitiveness Index of the World Economic Forum. It has been leading this Index for the 8th consecutive year. The country tops four pillars of the Index: labor market efficiency, business sophistication, innovation, and technological readiness. These factor conditions, coupled with attractive geographical location and political stability, create extremely favorable conditions for businesses. The local context also offers low taxes and policies favoring free trade.

There are many linkages and positive spillover effects between well-established service industries, such as financial services, insurance, luxury tourism, and business services. Finally, there is a strong international demand for niche Swiss products, as well as abundance of high net worth individuals in Switzerland. There are also some downsides, such as the lack of access to ports, protectionism in the agricultural sector, weak shareholder protection (listed companies have fewer requirements for financial disclosure than in the U.S.), and barriers to business creation.

2. SWISS BANKING CLUSTER

2.1. Global offshore wealth market

Wealth is generated everywhere either through value creation or through redistribution. However, wealth appropriation and preservation in any particular country may be difficult because of high taxation, complex regulation, poor private property and inheritance rights,

underdeveloped financial sector, financial and political instability, risk of expropriations among other reasons. The need for wealth preservation, asset protection, and tax minimization among wealthy individuals led to emergence of the offshore wealth market.

In 2014, global private financial wealth totaled US\$ 156 trillion (BCG, 2015). Most of this wealth, US\$ 145 trillion, is booked in a country of its origin, or in the so-called onshore market. Around US\$ 11 trillion is located offshore, i.e. outside the country of wealth origin (Exhibit 8).

Global private wealth is distributed unequally. Worldwide, the number of millionaires increased from 8 million in 2008 to 13 million in 2013. They hold some 42% of global wealth. By 2018, McKinsey expects the number of millionaires to grow to 18 million globally, while their share of global wealth will rise to 47% (McKinsey, 2013). Although the growth will primarily come from Asia, the Western world has and will still have the largest absolute number of wealthy families (around 14 million by 2018). Country-wise, Switzerland has the highest concentration of millionaires in the world, at 135 out of 1,000 households, followed by Bahrain (123), Luxembourg (120), Qatar (116), and Singapore (107).

Therefore, there are several reasons for the existence of offshore centers:

- Low taxation, light regulation of wealth and income, banking secrecy and anonymity.
- Economic and political stability are beneficial for the long-term wealth accumulation.
- Free movement of assets across borders with little or no transaction costs.
- Accumulated financial expertise that is sought out by wealthy individuals.

2.2. Competition

Switzerland holds a leading position in a US\$ 11 trillion offshore wealth market, with a 25% share. The amount of foreign assets booked in Swiss banks totals to US\$ 2.7 trillion in 2014, which equaled to almost 400% of GDP (**Exhibit 8**).

Global Financial Centers Index has been the widely-accepted ranking of financial center competitiveness over the past 20 years (Global Financial Centers Index). The top four cities in its rankings have always been London, New York, Singapore, and Hong Kong. However, Singapore and Hong Kong are quickly catching up and converging with London and New York in terms of their scores. The 2017 Index also includes two Swiss cities: Zurich is ranked 11th and Geneva is the 20th most competitive global financial center. Among Western European cities, Zurich is ranked 2nd (following London) and Geneva 4th (Luxembourg recently took over Geneva and is currently ranked 3rd). The rankings are based on surveys of finance professionals as well as quantitative metrics. The Index measures overall business environment, human capital, infrastructure, financial sector development, and reputation. While all global financial centers have certain common features, they also specialize in niche segments in which they hold competitive advantage, as illustrated in the table below.

Differentiation of global financial centers

Similarities between Financial Centers	Specialization of Financial Centers			
 Centers of commerce, open to trade Driven by domestic economic activity and high income level Strategic location, connectivity and infrastructure Access to skilled labor Stable political environment and economic and tax policy 	 London: trading and exchange of liquid assets (currency, metals) and cross-border lending. New York: public equity, debt market and investment banking Hong Kong: IPO and foreign exchange (specially RMB). Has attractive tax regime. Zurich and Geneva: wealth management, offshore banking services. 			

2.3. The role of the financial sector in the economy

The Swiss financial sector, including insurance, generated around 9.5% of GDP and provides some 6% of total employment in 2015 (EIU, 2016). The sector peaked in 2007, when its share in GDP was 12.8% and share in employment was 6.3%. After the Global Financial Crisis, the Swiss financial sector's assets have fallen sharply and the recovery has been slow.

Banking accounts for about 65% of financial assets, but generate slightly less than 50% of the value added in the financial sector. Insurance companies hold around 15% of assets, but account for 45% of value added in the sector (IMF 2014, and Basel Economics AG 2016). Pension fund industry is also large, with around 1,866 pension funds holding 15% of sector assets.

2.4. History of the banking cluster

Banking in Switzerland has a very long tradition stretching back to medieval times (**Exhibit 9**). Switzerland's limited agricultural land, lack of access to the sea, and ethnolinguistic diversity encouraged the early development of the traded goods sector (Steinberg, 2015). By 14th century, sophisticated banking and money exchange institutions were established in both Geneva and Zurich.

As the Industrial Revolution reached the country in the 19th century, precursors to modern banks started emerging in Swiss cities, particularly in Basel, where in 1854 Basler Bankverein, the forebear of the Swiss Bank Corporation was established as a result of the merger of six well-established banking houses.

Due to shortages of imports during the World Wars, Switzerland further focused on high value-added products, including financial services. During the tumultuous first half of the 20th century, many Europeans transferred their assets to Switzerland, which was perceived as a safe

haven given its political neutrality and financial sector's long-standing reputation for excellence. The Federal Banking Law, adopted in 1934, formalized the custom of banking secrecy that had existed throughout centuries in Switzerland. From then on, Swiss banks could formally keep secret personal and financial information about their clients from governments.

The country saw strong economic growth in the second half of the 20th century. Sound monetary and fiscal policy, coupled with prudent oversight of Swiss banks, ensured the stability of the financial sector. Banks started expanding internationally, and a period of mergers and industry consolidation ensued in the 1980s. Over the past thirty years, UBS and Credit Swiss emerged as the largest players in the industry.

2.5. Banking Cluster Diamond

Swiss banking cluster is very diverse. Banks in Switzerland employ wide range of business models – from traditional banking to investment banking and wealth management; they offer broad range of services and sophisticated products, and possess high level of expertise. The cluster map is, therefore, dense (**Exhibit 10**). However, where Swiss banking truly stands out is the *private banking*, or the *wealth management*.

In 2015, there were 266 banks operating in Switzerland, down from 330 banks in 2007. Their total assets stood at CHF 3.03 trillion, compared to CHF 3.5 trillion in 2007. Swiss banks are grouped in 8 categories depending on their size, regional or business focus, and ownership (**Exhibit 11**). While overall banking sector has been showing positive trends in revenues and profits over the past 5 years (**Exhibit 12**), the composition varies significantly across segments (**Exhibit 13**).

■ **Big banks**, which include UBS and Credit Suisse, are the industry leaders. They are global universal banks serving both to domestic and foreign clients. In 2015, these two banks

accounted for 50% of the banking sector assets and 36% of the employment. The share of these banks in total assets has been falling from a peak of 70% in the pre-crisis 2006-2007. This is partially due to the "too-big-to-fail" regulation requiring big banks to separate their investment operations from the rest of the businesses (to reduce financial risks), and also due to the elimination of secrecy laws. UBS had to resort to government bailout in 2008. Recently, it has shifted its focus towards wealth management and away from investment banking. In 2014, Credit Suisse paid the largest fine ever imposed by a U.S. court in a criminal case – US\$ 2.6 billion – for assisting American clients in tax evasion (EIU, 2016).

- Cantonal banks, Raiffeisen banks, and regional and savings banks serve predominantly to domestic customers. They offer savings deposits, mortgages and corporate loans. They have strong presence at the regional level and do not actively participate in the global transactions. Cantonal banks are largely owned by local authorities, and are concentrated on within-cantonal activities. Regional and savings banks are typically smaller and more locally focused than cantonal banks. These three groups of banks are domestically-oriented, and mortgage lending comprises the largest share of their banking activities.
- Foreign-controlled banks have a strong presence, although they have been shrinking in number from 150 foreign banks in 2000 to 111 in 2015, mostly because of abolition of banking secrecy, stricter regulatory requirements and declining profit margins. Some foreign banks or branches have been acquired by Swiss banks. These banks mostly focus on asset management and investment banking, earning the largest portion of their income from fees and commissions.
- Stock exchange banks and private bankers also focus on wealth management, while other
 banking institutions (14 banks) have no specific regional or business focus. These banks

earn most of their revenues from providing fee-based advisory services to international clients.

• Private banking, or wealth management is the key segment of the Swiss banking sector, where Swiss banks are particularly strong and competitive. According to the IMF, Swiss' UBS and Credit Suisse hold the first and the fifth positions globally by assets under management (Exhibit 14). BCG estimates that private banking revenues account for 50% of total banking sector revenues (Exhibit 15).

2.6. Private banking clients

Wealthy individuals have been traditional clients of the private banking/wealth management industry. There are several segments among clients – affluent, high net worth (HNWI), and ultra-high net worth individuals (UHNWI) – but wealth-based thresholds significantly differ across banks, countries, and regions. For example, UBS, the largest wealth manager in the world, defines ultra-high net worth individuals as those with investable wealth of over CHF 50 million, high net worth individuals – CHF 2-50 million, and affluent individuals – CHF 0.25-2 million (USB, 2016). Alternative mappings put thresholds at EUR 15 million and EUR 1 million respectively for Europe, or USD 100 million and USD 1 million for the US. Irrespective of particular thresholds, Swiss banks target households which are considered to be at least millionaires in terms of their investable assets.

2.7. Private banking products and value proposition

Given that most of the clients of Swiss banks are high and ultra-high net worth individuals, their financial demands and needs are very different and depend on a number of factors, such as the nature of their wealth, the domicile of their fortunes, risk tolerance, tax preferences, requirements for privacy, investment return objectives, financial and non-financial

constraints, and others. For example, the needs of a family that carried their wealth through multiple generations will be totally different from the needs of an Asian manufacturing tycoon, an Eastern European oligarch, or an African former dictator (Forbes, 2011).

To cater to such a diverse range of needs and to remain competitive at the same time, Swiss banks clustered around niche expertise and capabilities, rather than having developed a unified or a single value proposition (Boxes I-II). Historically, the private banking business differentiated itself through tailoring its services and products to a particular client, offering personalized, superior relationship management, integrated banking services, or deep expertise in a specific area of financial and asset management (e.g. custody, tax advisory, regulatory compliance, estate planning, intergenerational wealth transfer etc.). In terms of investment management, the products may vary from execution-only, when a bank simply executes client's orders, to discretionary investing, when a client outsources investment decision-making to a bank.

Box I: UBS: products and revenues

In terms of wealth management, UBS, the largest wealth manager in the world, provides perhaps the widest range of products and services. Its product offerings include investing services (tailored investment advice, portfolio construction and management, readv-made investment structured products and alternative instruments, security-based financing, multi-generational asset management, art advisory), retirement planning, payments and savings, mortgages, and digital services. Most of these products or commission-based, providing the bulk of the revenues for the UBS.

UBS financial performance by segment						
	Total	of	Profits			
in CHF million	Revenues	Interest	Non-interest	before tax		
Wealth management	15,073	3,279	11,295	3,055		
Retail and Corp banking	3,984	1,892	1,768	1,760		
Asset Management	1,931	-33	1,957	452		
Investment Bank	7,688	1,006	6,953	1,004		
Other	-357	270	-28	-2,181		
Total	28,319	6,414	21,945	4,090		
Non-inter	est incom	e break	down by pro	duct		
in CHF million 2016 Source:						
Portfolio management and a	Wealth management (WM)					
		0,000	wealth manage	ement (WM)		
Brokerage fees			WM and invest			
_			WM and invest	ment bank		
Brokerage fees		3,541	WM and invest	ment bank nent and WM		
Brokerage fees Investment fund fees	•	3,541 3,155 946	WM and investi Asset manager	ment bank nent and WMk		
Brokerage fees Investment fund fees Underwriting fees	•	3,541 3,155 946	WM and investor Asset manager Investment ban	ment bank nent and WMk		
Brokerage fees Investment fund fees Underwriting fees M&A and corporate finance	fees	3,541 3,155 946 733	WM and investor Asset manager Investment ban	ment bank nent and WMk		

Given that delivering such bespoke services requires more resources than mass-segment banking operations, Swiss banks' business model is based on charging premium prices in the form of fees and commissions for these services. That is why most private banks derive the largest portion of their revenues from non-interest income (up to 90% of total revenues), as opposed to less than 30% for traditional commercial banks (**Exhibit 16**).

Traditionally, low taxes on wealth and bank secrecy were also part of the value proposition for the clients. However, as McKinsey analysis illustrates, recent agreements on double taxation and tax information exchange have increased transparency and have begun shaping a new operating environment for offshore banks (McKinsey, 2014). In light of these developments, it is becoming increasingly difficult for Swiss banks to use their traditional endowments to attract or even keep clients.

Box II: Pictet and Lombard Odier: defining core competencies and market niche

Pictet

"As an investment-led service company, the Pictet Group focuses exclusively on wealth management, asset management and related asset services, including custody and fund administration services. The Group does not, however, offer commercial loans or investment banking services... Having no investment banking activities, we can act without conflict of interest and to the best advantage of our clients." (Pictet Group, 2016).

With CHF 436 billion of assets under management, Pictet is the 10th largest bank in the world by this metric. For comparison, Pictet's balance sheet assets totaled only CHF 40.4 billion in June 2016.

Lombard Odier

The bank positions itself as independent wealth manager focused on three core areas: private wealth management, asset management, and, surprisingly, technology for banking services. While the first two areas are traditional for the Swiss bank cluster, the technology one is relatively new, and was launched only in 2001. According to the bank, Lombard Odier "provides infrastructure supporting all banking activities – from portfolio management, to trading, custody, reporting, operational and back-office services – ... to clients, family offices, and other private banks." (Lombard Odier, 2016).

The bank was founded in 1796 and remained private until 2014. It changed its legal structure in 2014, becoming a limited partnership. Lombard Odier published its first ever annual report in 2015.

2.8. Related Industries: insurance companies, pension and investment funds, asset managers

Insurance and reinsurance companies are important players in the financial sector. Companies such Allianz, Cardif, Generali, Liberty, Skandia, and Swiss Life have been present in the country for over a century and also have significant international operations. The high level of income in Switzerland has sustained strong domestic demand for insurance and the market exhibits the highest rate of premiums per head in the world (EIU, 2016). This sub-sector has been consolidating over the recent years. In 2016, it was comprised of 214 companies (76 non-life insurers, 46 branches of foreign insurers, 59 reinsurers, 20 life-insurers (Federal Department of Finance, 2016). Pension funds, investment funds and other related asset managers are sectors demanding banking services from the Swiss cluster.

2.9. Government institutions, regulation, and associations

Swiss banking builds upon a stable macroeconomic environment and a strong regulatory framework combining self-regulation and external regulation. The Swiss National Bank (SNB) conducts the monetary policy to ensure price stability and create an appropriate environment for growth, and the Federal Department of Finance (FDF) is in charge of the federal fiscal policy including the budget, currency management, and taxation. The Swiss Financial Market Supervisory Authority (FINMA) is an independent financial market regulator supervising banks, insurance companies, exchanges, investment schemes and securities. The Swiss Exchange (SIX) is in charge of supervising stock exchange (trading, clearing, and settlement) and defining rules and requirements for listed companies and participants of stock exchange. SIX is owned by approximately 140 Swiss banks. Switzerland is also home to the Bank for International Settlements (BIS), an international financial organization promoting financial cooperation

between central banks, and the Financial Stability Board (FSB), an international organization monitoring the global financial system.

In terms of consumer protection, the "Ombudsman" offices for the banking and insurance services act as a neutral player among institutions. They offer information and mediation services, and respond to consumers' complaints against banks and insurance companies. The process is free for consumers and is kept confidential. Although its advice to resolve disputes is not binding, it tends to be accepted by the negotiating parties. The most recent regulation body is the *esisuisse* which requires banks to protect their preferential deposits through *esisuisse*, which will provide clients up to CHF 100,000 per depositor in case of bank insolvency.

Given the large number of banks in Switzerland, the strong presence of foreign players, and the high level of specialization, several institutions for collaboration offer support for specific segments of the banking business. These include, among others, SwissBanking, Association of Cantonal Banks, Swiss Insurance Association (SIA), Swiss Association of Asset Managers (SAAM), Swiss Insurance Brokers Association, Zurich Banking Association, Association of Foreign Banks in Switzerland, Swiss Funds and Asset Management Association (SFAMA), and Swiss Private Equity & Corporate Finance Association (SECA). These different institutions aim to promote better conditions for Swiss financial institutions in their relationships with Swiss authorities and with other markets.

The institutions for collaboration also protect reputation and trust in financial markets, and encourage self-regulatory mechanisms, knowledge sharing and adherence to quality standards. Some associations have partnered with the Swiss Association for Quality (SAQ) to offer a "Certified Wealth Management Advisor CWMA Program," which meets the requirements of the international ISO 17024 standard.

2.10. Suppliers and Supporting Industries

Traditional consultancy and business services, including accounting, taxes and legal advice, are sectors supporting the Swiss financial industry. The rapid increase of competition among financial services has also made information and communications technology a highly relevant service for the financial sector. Additionally, financial technologies, or fintech, are gaining relevance as suppliers of the Swiss banking. In response to the increasing role of technology, the Swiss Sustainable Finance (SSF), an association founded in 2014, aims to strengthen the position of Switzerland in the global market by sharing, informing, and promoting education and catalyzing growth. Swiss Finance+Technology Association also promotes the innovation ecosystem for fintech in Switzerland, representing different stakeholders and aiming to accelerate growth of the Swiss financial sector. Other agencies in the field include the Global Fintech Association, Swiss Finance Startups, and Swiss Fintech Innovations.

2.11. Universities and Research Institutions

Switzerland has widely acclaimed universities in Lausanne, Bern, Geneva and Zurich, offering programs related to the financial industry and hosting specific research centers. For instance, an International Asset Management Program can be completed at the University of Bern. The Swiss Finance Institute, a public private partnership, also offers a PhD program in close dialogue with practitioners and researchers on the field. An effort from SwissBanking and five banks also resulted in a modern learning center, CYP smart education, providing financial and banking education to apprentices and adults in Switzerland.

3. CHALLENGES

The Swiss banking cluster is facing a number of challenges, which can have impact on its long-term success. The generation of new wealth is shifting from Old World to Asia and other

big emerging countries, markets, where Swiss banks face significant competition. Furthermore, tighter transparency requirements and gradual abolition of the bank secrecy are endangering important elements of Swiss value proposition, namely privacy and anonymity. Next, regulatory compliance, need to Swiss banks are experiencing pressure from rising costs which erode margins and have already spurred wave of consolidation in the sector. Finally, rapid rise of digitalization and fintech undermines the value chain of both traditional banking and wealth management by offering better and more responsive client service.

3.1. Gaining new clients in Asia

In the past several decades, Asia has developed as a new center of global wealth driven by the rapid economic development of Asia Pacific countries like China, Singapore and Korea. Consequently, banks are competing to absorb the new Asian millionaires under their wealth management businesses. Swiss banks, while still maintaining the leading position in Asia (UBS is the first, and Credit Suisse is the third largest wealth manager in Asia) feel pressured. The pressure comes from Asian banks, who are comparatively smaller but have a local advantage, in the way that they have a huge franchise in Asia and understand the Asian businessman very well. Moreover, tighter capital controls in some Asian countries, such as China, create significant barriers for local wealthy individuals to shift their assets offshore, forcing them to use local-based banking systems. As a result, Swiss banks' profit margins are compressing: pre-tax profit margins in Asia-Pacific private banking are 21 basis points of assets under management – compared with 25-26 basis points in Europe, according to the BCG.

3.2. Adapting to changing regulatory environment and abandoning Banking Secrecy

As mentioned earlier, there is a global convergence in regulatory standards for banks. All major financial centers are in the process of implementing international standards, such as Basel

III or the OECD's standard for AEOI. While the broader advantages in differentiated regulation of financial centers will disappear, differentiation will still be possible in the area of regulatory implementation and handling of individual regulations. Hence, the devil will be in the detail in international banking regulations. In this regard, other countries are catching up with Swiss regulations that were quite restrictive to ensure the stability of the financial system.

While beforehand Switzerland has been meticulous in going beyond international minimum requirements for its banks to ensure their stability, other financial centers, including Singapore and Hong Kong, are also taking action in this regard and passing capital adequacy regulations that are higher and more restrictive than outlined in the Basel III framework. Moreover, Swiss regulators were also extremely meticulous in regulating banks that were considered to have systemic significance (the so called "too big to fail" financial institutions). More recently, other financial centers have also introduced regulations on systemically significant banks. Convergence is also observed in tax and money laundering regulations (FATCA, OECD's AEOI standard). Hence, the overall regulatory advantage of Swiss banks that enhanced their reputation as more stable financial institutions is slowly fading away. Moreover, now that Switzerland has agreed to implement additional money laundering and tax regulations, it must ensure that it is not at a disadvantage if it implements these regulations earlier than its competitors (BCG and Swiss Banking, 2014). Swiss banks will implement automatic exchange of information in tax matters (AEOI) in 2018, abandoning banking secrecy laws. Though FATCA may raise \$10 billion over ten years, the costs for the Swiss banks that have to implement it could be a lot more. For example, America has taken the toughest stance. It wants 11 Swiss banks to hand over their American clients' name lists. UBS agreed in 2009 to pay a \$780 million fine for aiding tax evasion and turned over data on more than 4,400 accounts.

FATCA may imply more pressure from US to each Swiss bank (examples of IRS investigations on UBS and Credit Swiss). Switzerland's reputation as a secretive tax haven may set to end following the introduction of rules over sharing bank account data.

3.3. Technological changes

New technologies have lowered the entry threshold for new suppliers in banking and thus heightened competition (Swiss Banking Association). Both technological changes and evolving client needs are calling the ideas and philosophies of established financial service providers into question. It is impacting all business areas of banking, from payment, deposit and lending, investment management and market provision. Consumers today expect to handle banking businesses from personal devices at touch of the button, compared with traditional banking characterized by non-onerous security and instant transactions. Digital solutions, like mobile payment apps and online fintech platforms make transaction and investment more convenient and allow better user experience. Clients, in the face of multiple choices, could choose the best financial service provider that appeals their needs most.

While highly diverse and niche private banking segment is still shielded from digital disruptions, unlike more traditional banking industry, it is not immune. For example, roboadvisors, which work like automated trading systems, can provide faster and cheaper investment advice than investment advisors. The use of big data and machine learning allows such systems to personalize advice to client's preferences and past behaviors (SwissBanking, 2015).

4. RECOMMENDATIONS

With emerging global trends, it is important for Swiss banking cluster to be ready to leverage its advantages in order to take benefits of opportunities, and to change and adapt in

order to tackle challenges and to remain competitive. Identified threats, like the shifting of wealth generation to Asia, where Swiss banks face tough competition, ever-expanding regulation and disappearing bank secrecy, and digitalization of banking services can weaken Swiss position in the global banking market. However, given the diverse nature of Swiss banking, it's unlikely that any of these trends will disrupt the cluster in the near-term. Moreover, Swiss banks have been constantly evolving for decades to accommodate to ever-changing global environment, and they proved to be quite successful in doing that.

Several specific recommendations are worth considering (Credit Suisse, 2014).

Challenges	Recommendations
Shift of the new wealth generation	 Highlight advantages of size, reputation, and expertise Leverage international network and infrastructure to provide client access to
to Asia	global markets
	 Cooperate with local banks to learn about Asian client's preferences
	 Pursue localization of offices and staff
	 Hire more local labor with knowledge of 'doing business' in Asia
	 Attract Asian banks to open branches in Switzerland
Expanding	 Promote Switzerland as destination for "clean" money
regulation and	 Harmonize regulation with EU
abolishment of	 Pursue bi-lateral agreements with EU countries to allow Swiss banks to serve
the bank secrecy	foreign clients out of Switzerland (Banking Barometer, 2016)
Digitalization and	 Be open to new ideas in the industry
fintech	• Guarantee data security and infrastructure stability which are fundamental elements of the Swiss banking cluster success (Credit Suisse)
	 Invest into development of in-house digital solutions for clients
	 Partner with non-financial firms to outsource certain cost-intensive services to Fintech
	 Promote rise and emergence of local Fintech cluster and its integration with traditional banks
Pressure on margins due to	 Consider merging and acquisition in the sector to create synergies or strategic value
the low interest	 Strengthen corporate banking as a central pillar of the export-led Swiss economy
rate environment	• Position Switzerland as a center for asset management in international terms to
and rising costs	attract more assets and funds from abroad

Disclosure

- (1) No team member is national of Switzerland or have resided for an extended period of time in Switzerland, (2) No nonpublic access to information about Switzerland or cluster was utilized, and (3) No team member
- traveled to Switzerland during the project period.

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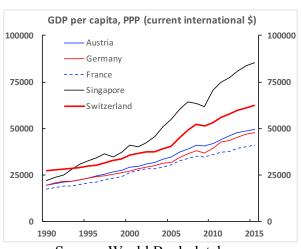
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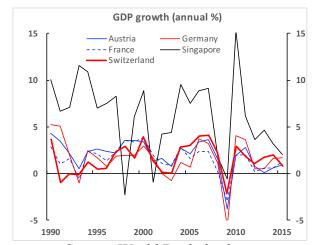
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- World Bank Doing Business Report
- World Development Indicators
- World Economic Forum Global Competitiveness Report (2016-2017)

Annexes

Exhibit 1: GDP level and growth





Source: World Bank database

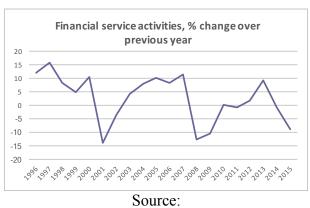
Source: World Bank database

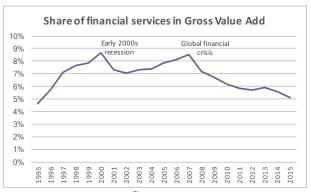
Exhibit 2: Countries by level of per capita GDP in 2015

Country Name	GDP per capita, PPP	Total natural resources rents, % of GDP	Fuel exports, % of GDP	Population , mln			
	Microcountries an	d city-states					
Macao SAR, China	111,497	0%	0%	0.6			
Luxembourg	102,052	0%	1%	0.6			
Singapore	85,382	0%	22%	5.5			
Brunei Darussalam	78,369	9%	49%	0.4			
Hong Kong SAR, China	56,923	0%	8%	7.3			
	Hydrocarbon	exporters					
Qatar	141,543	11%	46%	2.2			
Kuwait	74,645	39%	48%	3.9			
United Arab Emirates	69,971	12%	-	9.2			
Norway	62,084	5%	22%	5.2			
Saudi Arabia	53,539	23%	26%	32			
Non-oil rich countries							
Ireland	68,514	0%	1%	4.6			
Switzerland	62,557	0%	1%	8.3			
United States	56,116	0%	1%	321			
Netherlands	49,587	1%	-	16.9			
Austria	49,430	0%	1%	8.6			

Source: World Bank Development indicators, own calculations

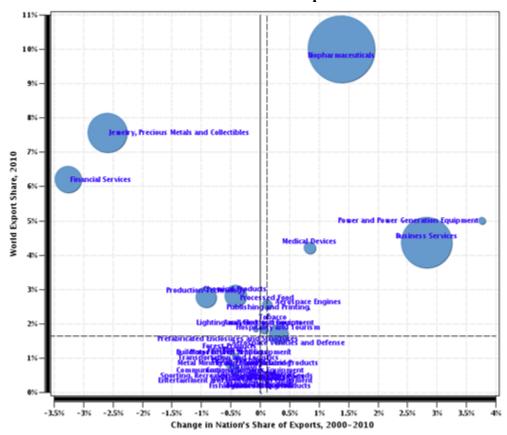
Exhibit 3: Financial sector growth and share in GDP





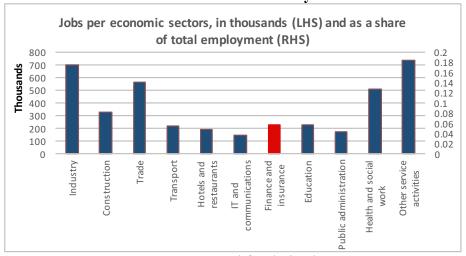
Source: Source:

Exhibit 4: Swiss exports



Source: http://data.isc.hbs.edu/iccp/

Exhibit 5: Jobs distribution by sectors



Source: www.bfs.admin.ch

Exhibit 6: Selected indicators of social development

	Austria	Switzerland	Germany	France	Singapore
Life expectancy	81.3	82.8	80.8	82.4	82.6
Infant mortality rate (per 1,000 births)	2.9	3.4	3.1	3.5	2.1
Public health expenditure (% of GDP)	11%	12%	11%	12%	5%
Expenditure on education (% of GDP)	5%	5%	5%	6%	3%
R&D expenditure (% of GDP)	3%		3%	2%	2%
Inequality (GINI coefficient)	29.2	28.7	27	30.1	46.4
Fertility rate	1.44	1.52	1.39	1.99	1.25

Source: World Development Indicators and CIA Factbook

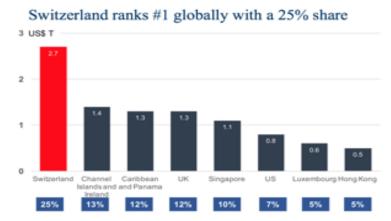
Exhibit 7: EUR/CHF



Source: Bloomberg

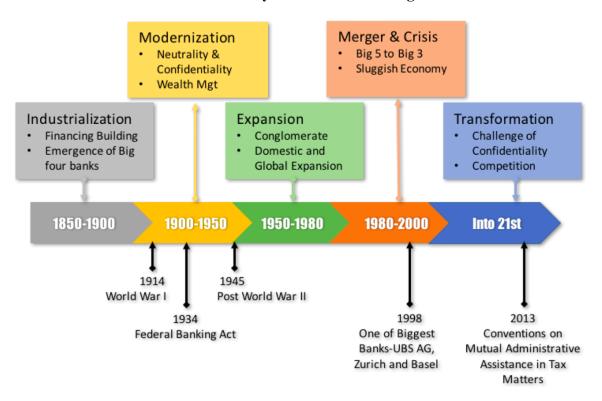
Exhibit 8: Global wealth market





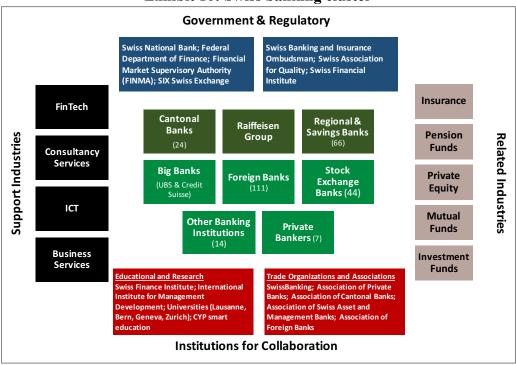
Source: BCG Report 2015

Exhibit 9: History of the Swiss banking cluster



Source: own compilation

Exhibit 10: Swiss banking cluster



Source: own compilation

Exhibit 11: Structural characteristics of Swiss banks, by groups

Characteristic	Big banks	Cantonal, Raiffeisen, regional banks	Foreign banks	Stock exchange, private, other banks	
Number of banks	2	91	111	65	
Number of staff ('000)	53	30	18	23	
Focus	Domestic and foreign	Domestic	Foreign	Foreign	
Product	Universal global banking	Domestic lending, mortgage business	Wealth management	Wealth management	
		Financials			
Total assets (CHF billions)	1,424	853	334	415	
Operating income (CHF billions)	32.6	12.8	8.5	10.8	
Net profit (CHF billions)	10.2	3.9	0.5	3.2	
Interest income, as% of operating income	32%	67%	25%	34%	
Commission income, as % of operating income	33%	19%	48%	48%	
Mortgage loans, as % of assets	19%	68%	10%	15%	

Source: Swiss National Bank (SNB), own calculations

Exhibit 12: Trends in banks' revenues and costs 2011 2012 2013 2014 2015 59.1 59.0 61.4 Operating income 60.8 64.6 40.4 Operaing expenses 40.4 41.5 41.3 44.8 17.4 Gross profit 18.7 19.5 21.0 19.9 Net profit 0.2 7.4 13.0 10.5 15.8 Interest income, % of operating income 37% 39% 38% 35% 36% Commission income, % of operating income 40% 40% 40% 39% 35%

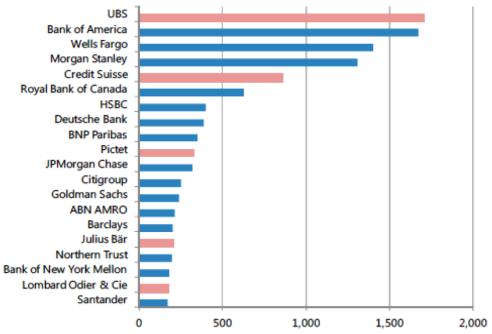
Source: SNB, own calculations

Exhibit 13: Trends in revenues by bank type

		EXHIDIUI	J. Hellus	III Tevenue	s by bank ty	pe		
						Interest	Commission	
in CHF	Interest	Commissio	Trading	Other	TOTAL	income, % of	income, % of	
billions	income	n income	income	income	INCOME	total income	total income	
Big banks								
2011	6.6	10.9	5.3	4.6	27.5	24%	40%	
2012	6.9	11.1	5.2	4.4	27.6	25%	40%	
2013	7.7	11.7	5.0	3.8	28.2	27%	41%	
2014	9.2	11.2	4.5	4.2	29.2	31%	39%	
2015	10.5	10.7	4.8	6.7	32.6	32%	33%	
			Fo	reign banks				
2011	3.3	5.2	1.3	0.7	10.4	32%	50%	
2012	3.4	5.4	1.2	0.9	10.8	31%	50%	
2013	3.0	5.2	1.1	0.9	10.1	29%	51%	
2014	2.8	4.9	0.9	1.0	9.6	29%	51%	
2015	2.1	4.1	1.1	1.1	8.5	25%	48%	
		Domestic-c	oriented bar	nks (cantonal	l, regional, Rai	iffeisen)		
2011	8.5	2.3	1.0	0.3	12.2	70%	19%	
2012	8.5	2.3	1.0	0.4	12.3	69%	19%	
2013	8.4	2.4	1.0	0.5	12.3	69%	19%	
2014	8.4	2.4	0.9	0.6	12.3	68%	20%	
2015	8.6	2.4	1.1	0.7	12.8	67%	19%	
	Wealth managers (stock-exchange, private, other banks)							
2011	2.4	5.2	1.1	0.4	9.1	26%	57%	
2012	2.2		1.1	0.3	8.2	27%	56%	
2013	3.1	5.2	1.3	0.6	10.1	31%	51%	
2014	3.3	5.3	1.3	0.4	10.4	32%	51%	
2015	3.7	5.2	1.5	0.4	10.8	34%	48%	

Source: SNB, own calculations

Exhibit 14: Top 20 Global Banks by AUM, USD billion.



Source: IMF Country Report #14/143, 17.

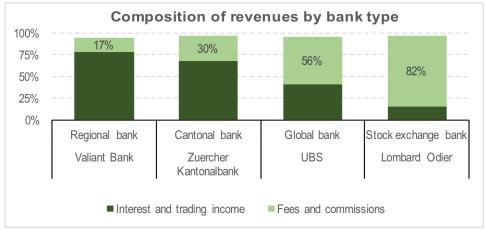
Exhibit 15: Trends in revenues by business area



Source: Actively shaping transition – future prospects for banking in Switzerland. BCG report,
October 2014

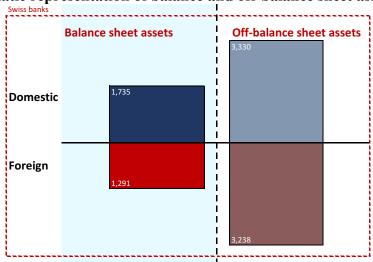
Exhibit 16: Revenue composition of 4 Swiss banks in 2015

Zuercher Kantonalbank **UBS Lombard Odier** Revenue composition Valiant Bank Stock in CHF mln Regional bank Cantonal bank Global bank exchange bank Net interest income 287 1,162 6,732 64 17,140 Net fees and commissions 64 663 885 12 328 5,742 101 Trading income Other income 18 52 1,107 25 **Total income** 382 2,204 30,722 1,075 Share: Interest and trading 78% 68% 41% 15% Fees and commissions 17% 30% 56% 82%



Source: Annual Reports of respective banks, own calculations.

Exhibit 17: Schematic representation of balance and off-balance sheet assets of Swiss banks



Source: SNB, own calculation