Swiss Private Banking

Microeconomics of Competitiveness

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COMPETITIVENESS OF SWITZERLAND

Country Overview

Switzerland ranks among the most stable, modern and highly developed market economies in the world. Landlocked and highly mountainous, the Swiss population of 7.8 million people is linguistically diverse, highly educated and dispersed across 26 cantons. The Swiss government maintains a tradition of neutrality in foreign policy and has been a constitutional democracy since 1848. The Swiss franc is one of the world's most trusted stores of value and the Swiss National Bank (SNB) has been successful at managing inflation post WWII.

Geographic and Demographic Endowments

Officially known as the Swiss Confederation, Switzerland's territory is geographically divided between the Alps and the Central Plateau. The country is bordered by France to the west, Austria and Liechtenstein to the east, Germany to the north, and Italy to the south. Bern is the federal government capital, while Zurich and Geneva are the most important commercial centers. The total area of Switzerland is 15,940 square miles, approximately the same area as the U.S. state of New Jersey (CIA, 2010). Relative to its neighbors, Switzerland has limited arable land (9.1% of total).

The Swiss population is concentrated heavily in the urban areas of Zürich and Geneva. The three main languages in Switzerland are German (spoken by 63.7% of the population), French (20.4%), and Italian (6.5%) (CIA, 2010).

Polity Overview

The establishment of the Swiss Confederation is traditionally dated to 1291 when a defensive alliance between several cantons was first established. In current form, Switzerland has existed as an independent, federal democracy since the adoption of the Swiss Federal Constitution in 1848, which is among the oldest constitutions in the world. Swiss citizens are subject to three legal jurisdictions: the commune, canton and federal. The three main national governmental bodies include a bicameral parliament, executive and judicial branch. The Swiss constitution contains a strong element of direct democracy and allows citizens to propose new laws and challenge acts of parliament through referendum.

In regard to foreign policy, Switzerland maintains a robust military but has a long history of neutrality. Switzerland has not been involved in a conflict with another state since 1815 when the Congress of Vienna re-established Swiss independence and the major European powers agreed to permanently recognize Swiss neutrality. Today Switzerland hosts many international organizations, including the Red Cross, World Trade Organization the United Nations and International Olympic Committee, the Bank for International Settlements, and European Free Trade Association.

Economic History

- ***Origins:*** Switzerland's limited agricultural land, lack of access to the sea, and ethno-linguistic diversity encouraged the early development of traded goods sector (Steinberg, 2008). By 1300, sophisticated banking and money changing institutions were established in both Geneva and Zurich. Italian speaking communities in several cantons maintained financial linkages with banking powerhouses in Florence and Milan. During the 100 Years War, successive waves of Protestant refugees brought new banking practices and connections with markets in Germany and France. The development of the banking sector would be largely independent of influence from national authorities due to the canton system.
- ***Early Industrialization:*** The industrial revolution, begun in Great Britain in the late-1700s, reached Switzerland at the turn of the century with the importation of third-generation mills for use in the country's robust textiles sector. However, many machines were coal-powered and Switzerland lacked coal deposits, so hydraulic modifications were made. Napoleon's Continental Blockade of 1806 prevented any further importation of British machines, and thus Swiss factories began producing their own hydro-powered machines (Jud).
- ***Latecomer to Rail, but Developed by Private Sector:*** The world's first passenger locomotive was introduced in Britain in 1825, but Swiss rail development lagged for 25 years, as it was initially difficult for private railway companies to obtain concessions from each canton. This changed with the establishment of the federal government in the Constitution of 1848, who had supervisory authority over rail systems and delegated responsibility for railway development to each canton, "who then granted concessions to private companies" (Federal Department of Foreign Affairs). Over the next thirty years, more than 2,500 km of rail track was built, connecting both cities and rural areas.

- ***A History of Free Trade***: Donze describes the evolution of Swiss free trade policy:

> "When France, Switzerland's main trade outlet, adopted a protectionist policy in the 1820s, [Swiss] merchant bankers succeeded in getting the concept of free trade firmly established and in developing exports to foreign markets (such as the United States, Latin America, and the Middle East). This liberal policy kept wages low. … During the 1840s, several cantons called for the abolition of cantonal boundaries and the establishment of a federal state, in order both to encourage the development of a home market (the landed aristocracy) and to minimize the obstacles to building railways that would link the country to the European network (the industrial elites). … The 1850s and 1860s saw both the unification of the home market (through the abolition of internal duties, the establishment of a single currency, and the construction of railways) and the creation of a lasting free-trade policy. During this period, Switzerland signed trade agreements with the minimum of restrictions, generally based on a most-favored-nation clause, and did not pass tariff treaties." (Donzé, 2006)

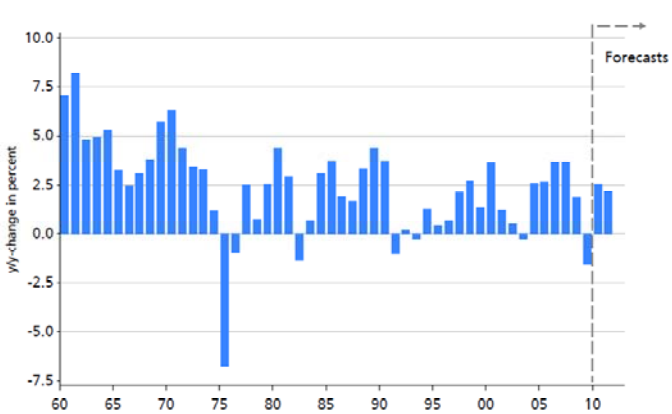
  In the 1890s, however, Swiss farmers successfully lobbied for agricultural tariffs, which gave the government financial means (via customs duties on imported food) without imposing a national tax system. Thus, at the turn of the twentieth century, framework conditions were in place "for undertaking the huge investments required for the development of industrial sectors based on leading-edge technologies (machinery, electricity, chemicals etc.)" (Humair, 2004).

- ***Crisis to Opportunity, WWI-1920s:*** By the beginning of the early 20th century, Switzerland's industrial sector rivaled France, Prussia and Great Britain in size and sophistication (Steinberg, 2008). WWI, however, disrupted coal supply and caused a shortage of labor. As a result, Swiss industries became even more highly specialized in high valued added goods and services, such as watches, chemical refining and financial services.

- ***Accumulation of Assets, 1930s:*** Following WWI, hyperinflation, bank failures and instability plagued Swiss neighbors. "Out of fear of currency devaluation, political insecurities, foreign exchange controls, dispossession or war, many Europeans transferred some of their liquid assets to Switzerland during the 1920s and early 1930s. Switzerland's traditional neutrality, the Swiss financial center's international reputation, its easy accessibility in the center of Europe, the lack of foreign exchange controls and the strong Swiss franc made Switzerland a popular haven" (Vogler, 2006). Vogler emphasizes Swiss neutrality as a "decisive influence" and reason why customers decided to open a Swiss bank account, citing the example of the Bank for International Settlements being established in Basel after WWI, since the countries involved in reparations payments "could not agree on a location in one of the former belligerent nations" (Vogler, 2006).

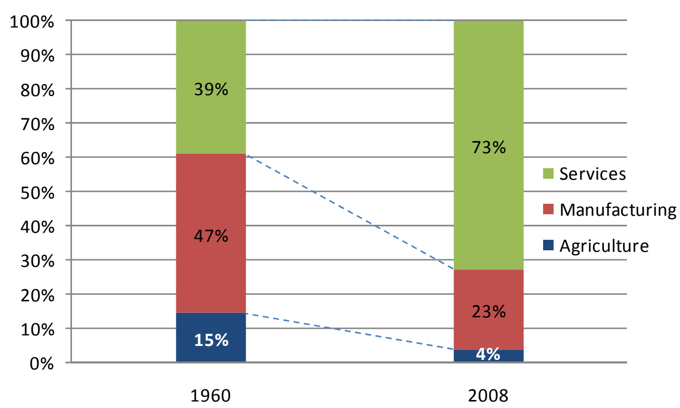
- ***Calm amid the Storm, 1930s-WWII****:* In the 1930-40s, the Swiss economy endured the significant impact of its neighbors' wartime spike in demand for coal and steel, but also profited from the increased exports of weapons, refined metal products and financial services. Banking secrecy became national law with the Swiss Banking Act of 1934. Swiss private banks provided financing for various countries during the war and accepted large deposits from individuals seeking to move their money away from neighboring governments.
- ***Growing Strength, 1940s-1950s****:* Relatively unscathed by the destruction of World War II, Switzerland's sophisticated industries facilitated the country's rapid postwar economic growth through manufacturing exports. During the 1950s, annual GDP growth averaged 5%. Services, especially the banking sector, grew in size and sophistication. Switzerland joined the Bretton Woods system, tying the Swiss Franc (CHF) to the U.S. Dollar.
- ***Recent Economic History:*** Switzerland's economic history has been marked by steady movement to higher productivity industries and services. Switzerland overcame early obstacles to economic growth – including an unstable neighborhood, no access to the sea, limited natural resources and a small domestic market – to achieve strong real GDP growth for most of its modern history. According to the 2010 Economic Freedom Index, Switzerland is the sixth most open economy in the world and second in the European region. The chart below left illustrates Switzerland's year-over-year GDP growth since 1960, as well as the impact of exogenous shocks on the Swiss economy (such as the oil crisis mid-1970s). In the last two decades, economic growth has been primarily driven by trade, FDI and innovation.

Switzerland Percent Change Real GDP Growth 1960-2010



Source: UBS Reuters EcoWin, UBS WMR.

Percentage of Swiss Workforce by Sector of Economy, 1960 - 2008



Source: Swiss Federal Statistic Office

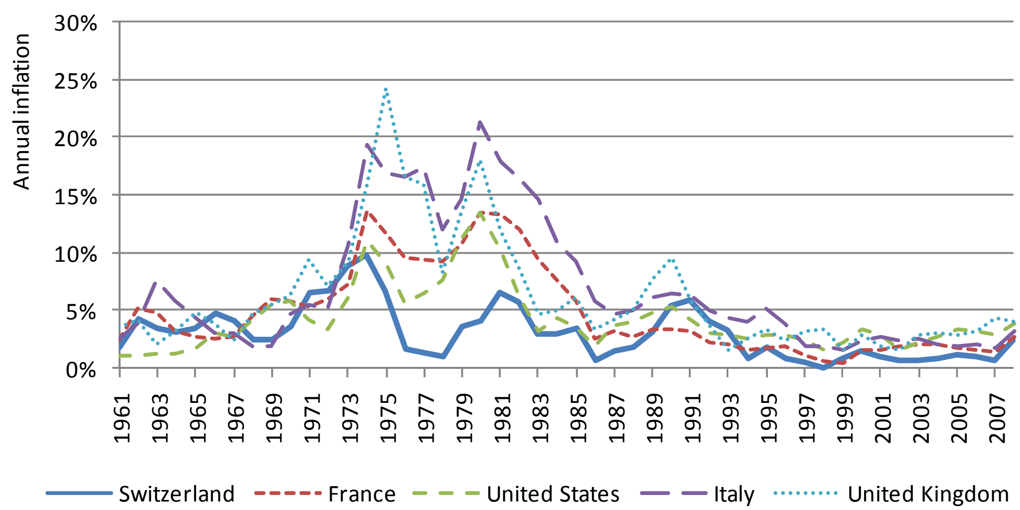
Modern Switzerland

Today Switzerland has one of the world's leading economies, with PPP-adjusted per-capita GDP of $42,000 in 2008 (EIU, 2010). This ranks Switzerland fourth among OECD nations, behind Luxembourg, Norway and the United States (OECD, 2009). According to the UNDP's Human Development Index Global Ranking, Switzerland ranks ninth out of 182 countries (UNDP, 2009). Switzerland is situated at the center of the 27-member European Union, but is not a member state. Instead, Switzerland has negotiated Bilateral Treaties I and II with the EU to remove trade barriers and allow free movement of labor and capital, among other integrative measures. Today Switzerland boasts the freest trade relations with the EU of any non-member. Importantly, Switzerland's status as a non-member has maintained the Swiss National Bank's independence in setting monetary policy.

Monetary Policy and Domestic Savings

Consistent monetary policy and historically high savings rate have contributed to an increased capital pool in Switzerland. The Swiss National Bank has a long history of successfully controlling inflation, which has remained within a tight 0-2% band (measured by CPI) since the mid-1990s:

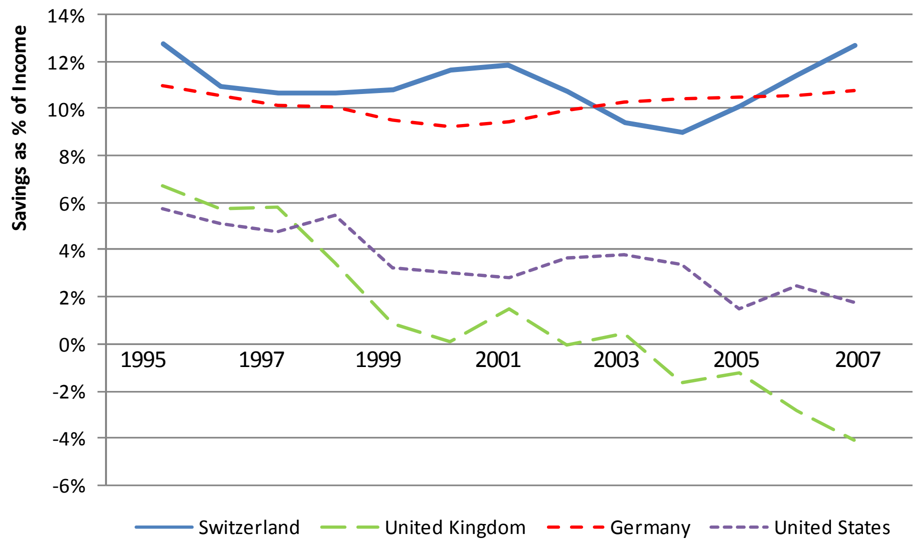
Swiss Inflation vs. Peers (1961-2008)



Source: World Development Indicators, The World Bank Group, accessed April 2010.

The CHF remains a small but significant reserve currency (sixth globally by volume held, as measured by COFER) (IMF, 2010). The CHF tends to appreciate during financial distress, signaling global confidence. Additionally, Switzerland's high trade activity has contributed to its perennial current account surplus, an amount which has increased in value since the 1990s. Swiss households save more than peer countries with comparable levels of per capita national income, as measured by the percentage of household disposable income devoted to savings (OECD, 2010). Combined with strong capital inflows, these aspects of Swiss economic behavior have encouraged capital accumulation.

Household Savings as a Percentage of Disposable Income



Source: OECD Statistical Database

Economic Policy

Switzerland has traditionally run fiscally conservative policies, focusing on economic stability. Situated in the middle of Europe, the majority of trade transpires with surrounding EU countries. However, some protectionist measures remain, principally with tariffs on food importation and agricultural subsidies. Switzerland attempts to attract FDI through low corporate taxes and ranks eighth among OECD countries for tax rates, with an effective rate of 21.2% in 2009 (OECD, 2010). Only Eastern European countries, Iceland and Ireland have more favorable tax rates.

Swiss Competitiveness

Switzerland has become one of the most competitive countries its challenging endowment. As an early adopter of free trade, Switzerland successfully integrated itself into its European neighborhood as well as the larger global economy, without ceding political sovereignty. In the World Economic Forum's *Global Competitiveness Report* for 2009-2010, Switzerland ranked first in competitiveness. Over the period from 2001 to 2009, Switzerland ranked in the top 15 countries (out of 74 total) in a given GCR category more than 80% of the time.

According to INNOVA, the main drivers of Switzerland's successful competitive positioning to date have been high productivity, modest taxes, macroeconomic stability, leading-edge infrastructure, liquid capital markets and a stable financial sector, a highly-educated workforce, world-class universities and R&D facilities, and political stability (INNOVA, 2007). A November 2009 study by Arthur D. Little largely concurred with this list, citing "economic competitiveness, an attractive tax system, highly qualified labor, a central location with excellent infrastructure, quality of life and support from administrative authorities" as the reasons why 269 companies transferred their headquarters to Switzerland between 2003 and 2009 (OSEC, 2009-2010).

In certain areas, there is room for Switzerland to improve its competitive position relative to other countries. For example, the country still has protectionist agricultural policy and a somewhat inflexible workforce in certain sectors. Additionally, weak investor protections undermine the efficiency of otherwise smoothly-functioning capital markets. The sections that follow discuss Switzerland's competitive strengths and weaknesses in greater detail.

Productivity

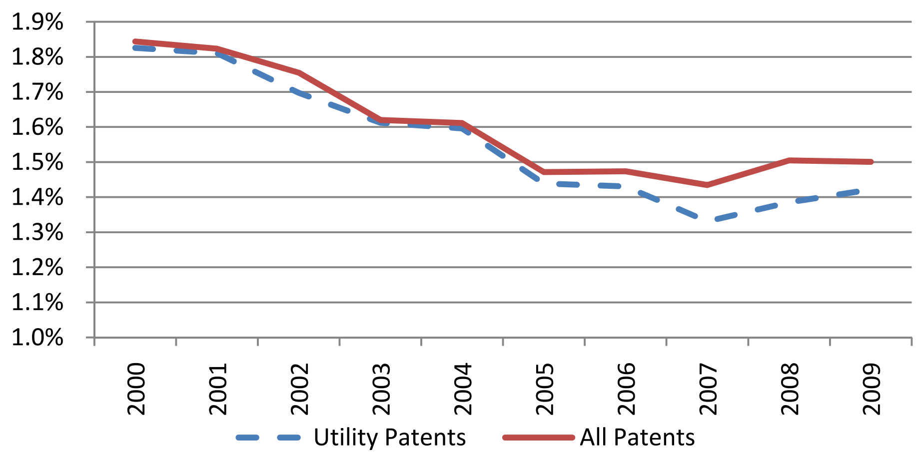
Switzerland is among the leading countries in the world in terms of productivity. In 2005, the Swiss National Bank released a study which disaggregated the three traditional components of national output growth (capital productivity, labor productivity, and the residual multi-factor productivity or TFP) into five, more detailed components (capital stock, capital quality, labor stock, labor quality, and residual TFP) arguing that the mix and quality of labor/capital content were significant. Importantly for private banking (and the greater financial services sector in general), it was determined that capital productivity was the single largest determinant of annual Swiss GDP growth, representing 0.57% of the Swiss average annual output growth of 1.28%. Moreover, once disaggregated, only 16% of capital productivity stemmed from quality of capital, whereas the remaining 84% majority contribution arose from growth in the capital stock. These results tie neatly with the private banking business model (asset accumulation) and, indeed, with economic scale theory in general (Zurlinden, 2009).

Simple accumulation of capital does not fully explain Switzerland's sustained productivity growth, since capital must be deployed efficiently by a productive labor force. It is therefore critical to understand Switzerland's innovative landscape, which provides insight into the dynamics of Swiss productivity.

Capacity for Innovation

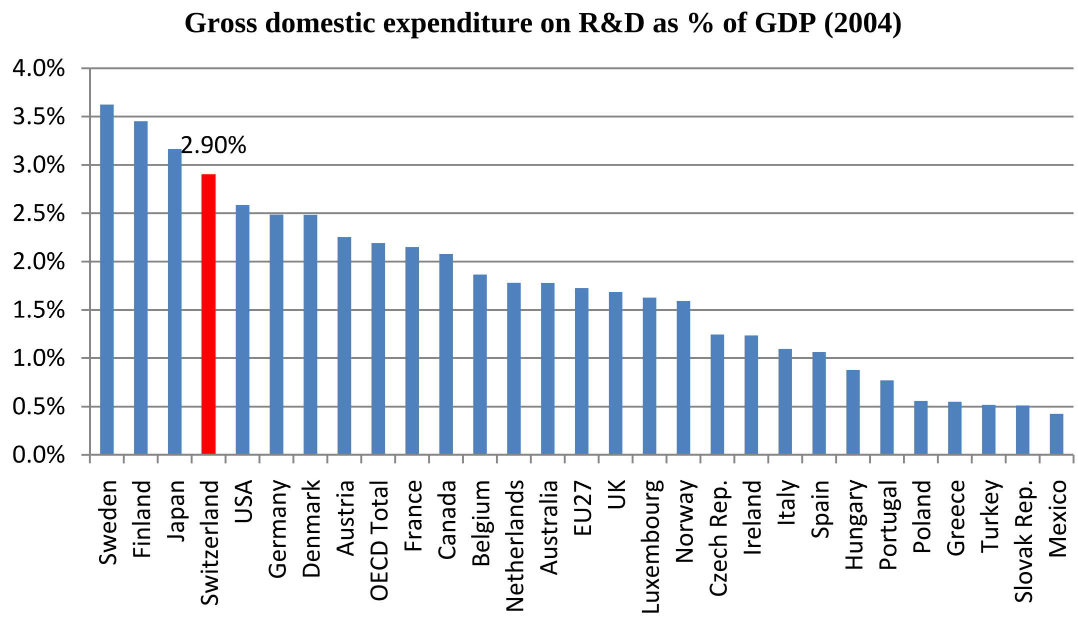
On a PPP-adjusted basis, Switzerland GDP counts for only a 0.45% share of the world total (World Economic Forum, 2009). However, Switzerland's cumulative (to date) share of U.S.-issued utility patents ("invention patents") far outstrips its GDP proportion by more than 6x, representing 2.88% of all foreign-origin utility patents issued (and tracked) by the PTO up to 2009. When looking at *all* patents (including design patents, plant patents, etc.), Switzerland's representation is similarly high, at 2.4% of foreign-originated patents. Despite this impressive patenting performance, the trend in recent years has been negative, as seen in the chart below. From 2000 to 2009, U.S. utility patents of Swiss origin grew at a CAGR of only 2.2%, compared to a 12.9% CAGR for similar patents issued to South Korea and Taiwan.

Swiss Share of Foreign-Origin US Patents (2000-2009)



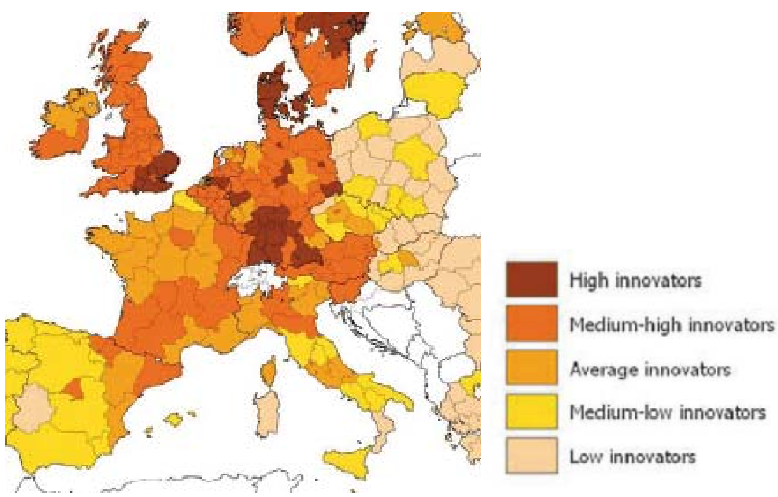
Source: US Patent Trademark Office

Notwithstanding the recent relative decline in patents, Switzerland still excels in other measurements of innovation. As the chart below shows, Switzerland is a leader in R&D spending among OECD countries.



Source: OECD

Finally, according to PRO-INNO Europe, an initiative of the European Commission’s *Competitiveness and Innovation Programme*, Switzerland ranked #1 in the 2009 Innovation Scoreboard. Switzerland also finds itself immediately surrounded by innovative regions. As depicted in the graphic below, each region neighboring Switzerland is categorized as “High Innovators” or “Medium-High Innovators” (PRO-INNO EUROPE, 2009).

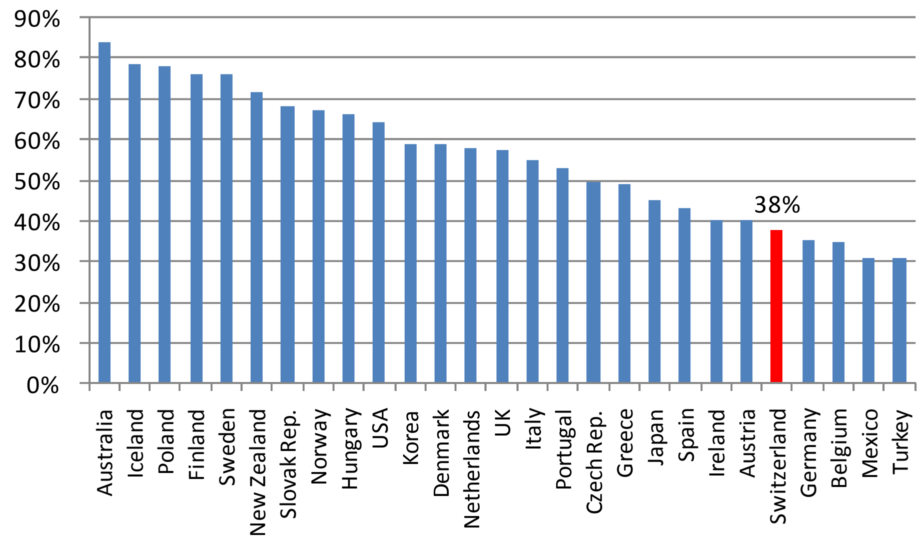


Source: PRO-INNO EUROPE

Despite these accolades and leading rankings, underlying the data are areas for potential improvement in Swiss innovation. It appears that despite leading R&D capacity, Switzerland does not take full economic advantage of its knowledge base; in other words, there are relatively fewer direct-spillovers from Swiss research institutions to commercialized products. Moreover, the general climate for entrepreneurship needs enhancement.

Despite solid science, engineering and management education systems, overall tertiary education in Switzerland is low and its advantages in human capital appear to be eroding. The table below depicts the ratio of tertiary enrollment among the corresponding-aged population.

Tertiary Education Entry Rates (2006)



Source: OECD.

To increase innovative performance, the factor conditions for entrepreneurs must be improved (PRO-INNO EUROPE, 2009). With MNCs dominating the Swiss innovation landscape, opportunity for start-ups and SMEs appears diminished. As shown in the table below, 65% of the top 20 Swiss “inventors” (as measured by U.S. utility patents issued 2005-2009) are the world’s leading companies (appearing on the Forbes 2000 list).

US Utility Patents issued to Swiss Entities (2005-2009)

Rank	Patent Assignee	Total # Patents	Forbes Rank	Global HQ	*Notes*
1	INTERNATIONAL BUSINESS MACHINES CORPORATION	255	33	USA	
2	ALSTOM TECHNOLOGY LTD	223	244	France	
3	CIBA SPECIALTY CHEMICALS CORPORATION	161	97	Germany	*Owned by BASF*
4	HOFFMANN-LA ROCHE INC.	150	66	Switzerland	*Roche*
5	INVENTIO AG	148	--	Switzerland	*Patent litigator ("patent troll")*
6	PHONAK AG	103	--	Switzerland	
7	NOVARTIS AG (FORMERLY SANDOZ LTD.)	79	61	Switzerland	
8	NESTEC, S.A.	78	36	Switzerland	*Nestle*
9	SYNGENTA CROP PROTECTION, INC.	67	375	Switzerland	
10	ETA SA MANUFACTURE HORLOGERE SUISSE	66	793	Switzerland	*Subsidiary of Swatch Group*
11	ASULAB S.A.	65	793	Switzerland	*Subsidiary of Swatch Group*
12	ENDRESS + HAUSER FLOWTEC AG	56	--	Switzerland	
13	LEICA MICROSYSTEMS (SCHWEIZ) AG	56	366	Germany / USA	*German co., owned by Danaher (USA)*
14	SWISSCOM MOBILE AG	55	352	Switzerland	
15	METTLER TOLEDO AG	49	--	Switzerland	*Incorporated in Delaware*
16	ABB RESEARCH LTD.	48	143	Switzerland	
17	ECOLE POLYTECHNIQUE, FEDERALE DE LAUSANNE	46	--	Switzerland	*Education / Research institution*
18	SYNTHES (U.S.A.)	45	938	Switzerland	
19	HILTI AKTIENGESELLSCHAFT	44	--	Liechtenstein	
20	TECPHARMA LICENSING AG	44	--	Switzerland	*Patent acquirer / licensor*

Source: US Patent Trademark Office.

Country Diamond

Switzerland's *Factor Conditions* are a significant contributor to its competitive position. Historically speaking, the country's location in the center of Western Europe, coupled with its neutrality, strong currency and lack of foreign exchange controls made it a magnet for foreign capital in the 1920s, 1930s, and post-WWII years. Given limited natural resources and its location surrounded by steep, inaccessible mountain ranges, the country was forced to industrialize early and eventually develop leading-edge modern railway systems to climb steep slopes (Federal Department of Foreign Affairs). Today, Switzerland leads GCI rankings in infrastructure, business transport, communications networks, quality and collaboration among research institutions, and financial market sophistication.

One *Factor Condition* area where Switzerland lags is in the country's administrative burden. Given the de-centralized nature of the cantonal government system, it can be relatively difficult in Switzerland to conduct business, pay taxes, or otherwise navigate the multi-layered administrative infrastructure.

The Swiss *Context for Strategy and Rivalry* similarly draws from historical circumstances to explain today's competitive advantages. As a small country, Switzerland was (and is) reliant on exports, and thus adopted free trade policies before many of its neighbors. (It is worth noting, however, that its relative dearth of arable land is a contributor to Switzerland's enduring protectionist agricultural policies.) While not a member of the European Union, Switzerland negotiated Bilateral Treaties I and II which provided it access to the European Free Trade Area in 1992. Today, the country has extremely low tariff rates, few/undisruptive SOEs, and essentially unrestricted capital flows. Swiss federal government has been stable over the last century, and provides several effective public agencies. Switzerland has long-standing rule of law and strong intellectual property protection. Additionally, as one of the richest countries in the world, Switzerland boasts a high quality of living, in part due to high wage levels and low taxes.

Certain *Context* factors belie the Swiss reality, however. In lieu of tariffs, certain non-tariff barriers have been enacted, such as restrictions on work visas or foreign ownership of Swiss-listed stocks, as well as onerous Switzerland-specific labeling requirements on food products. Joining the EU Schengen Zone facilitated relocation of EU nationals to Switzerland, but it is now exceedingly difficult for American workers to obtain Swiss working visas. Moreover, Switzerland appears to be distinctly inhospitable to stockholders, ranking in the bottom decile (out of 183 countries) for investor protections, according to the World Bank *Doing Business Report*. Swiss corporate secrecy provisions limit the amount of discoverable information available to investors in shareholder lawsuits, and directors of Swiss companies are generally not held liable, nor are they subject to disclosure requirements along the lines of Sarbanes-Oxley.

Regarding *Demand Conditions*, Switzerland's successful economic performance over the 20th Century has provided an affluent local population with sophisticated buyers, reflected in the 2009 GCR rankings. Beyond the national level, multiple factors have contributed to Switzerland's access to highly-developed regional demand. Switzerland has language and cultural commonalities with several of its neighbors, and its early adoption of free trade has provided market access beyond its small domestic economy. From a policy standpoint, Switzerland is a leader in consumer protection and environmental regulation. Examples of this include the 2009 of Google Maps' "Street View" feature for insufficiently blurring personally-identifying features (Claburn, 2009), a 2005 referendum ban on genetically modified foods (GMO Compass, 2010), and even a 1981 ban on caged poultry, Switzerland being the first country to do so (Animal Welfare Institute, 1995).

RSI: Clusters and MNCs in Switzerland

Switzerland is home to some large and fully-developed clusters as measured by export portfolios, including Biopharmaceuticals with $37 billion or 8.8% of world market share in 2007, Financial Services with $25 billion or 7.2% share, and Jewelry, Precious Metals and Collectibles with $24 billion or 8.3% share (Institute for Strategy and Competitiveness). Services comprised 70% of Swiss GDP in 2008, with Manufacturing/Industry representing 29% and Agriculture the remaining 1% (EIU, 2010). It is perhaps unsurprising, then, that Switzerland's fourth-largest cluster, Business Services, has increased in market share to 2.7% globally in 2007 ($20.9 billion export value) from 1.25% in 1997.

Switzerland is also home to a disproportionate amount of multinational corporations (MNCs). Switzerland represents 0.11% of the world population according to the World Bank (World Bank, 2010), but is home to 2.4% of the world's leading companies (Forbes, 2010). Famous MNCs include UBS AG, Zurich Financial Services, Swatch Group, Nestlé, Novartis, and Hoffmann-La Roche. Moreover, Swiss companies represent 4.0% of aggregate profit for the world's top 2,000 companies. At the national level, top Swiss companies obtain a higher margin (measured by profits / sales) at 8.0%, second only to Hong Kong among selected peers.

Forbes 2000 List of the World's Leading Companies, 2010	# of Co's	Sales ($bil)	Profits ($bil)	Assets ($bil)	Mkt Value ($bil)	% Margin (Profits / Sales)
Forbes 2000, Aggregate	**2,000**	**$30,000**	**$1,410**	**$124,020**	**$31,410**	**4.7%**
Switzerland	48	$715	$57	$4,033	$1,039	8.0%
% of Aggregate	*2.4%*	*2.4%*	*4.0%*	*3.3%*	*3.3%*	
USA	536	$8,957	$448	$27,995	$10,693	5.0%
% of Aggregate	*26.8%*	*29.9%*	*31.8%*	*22.6%*	*34.0%*	
UK	93	$2,042	$113	$13,361	$2,171	5.5%
% of Aggregate	*4.7%*	*6.8%*	*8.0%*	*10.8%*	*6.9%*	
Singapore	18	$126	$8	$611	$214	6.5%
% of Aggregate	*0.9%*	*0.4%*	*0.6%*	*0.5%*	*0.7%*	
Italy	38	$828	$37	$4,917	$445	4.4%
% of Aggregate	*1.9%*	*2.8%*	*2.6%*	*4.0%*	*1.4%*	
Germany	57	$1,771	$39	$7,565	$941	2.2%
% of Aggregate	*2.9%*	*5.9%*	*2.8%*	*6.1%*	*3.0%*	
France	64	$2,007	$69	$11,724	$1,377	3.4%
% of Aggregate	*3.2%*	*6.7%*	*4.9%*	*9.5%*	*4.4%*	
Hong Kong	49	$348	$51	$1,002	$804	14.6%
% of Aggregate	*2.5%*	*1.2%*	*3.6%*	*0.8%*	*2.6%*	

Policy Recommendations at the National Level

The Swiss federal government should pursue a national cluster policy. While Switzerland's successful clusters have developed in the absence of any formal, national cluster policy, a top-down examination of competitive strengths, linkages and contextual factors at the national level would enable the most efficient allocation of resources to competitive industries. Four cantons in Switzerland have enacted their own regional cluster policies, including "The Ark" in Valais, Biovalley Basel, Nanocluster Bodensee, and Cluster Policy for Bern (INNOVA, 2007). However, there is some overlap among the domains of these regional clusters. For MNCs like Roche or Novartis, it is inefficient to be involved with multiple competing canton clusters.

Moreover, there are specific areas of the Swiss government and Swiss economy that need overhauling / streamlining. Switzerland may have low tax rates among OECD nations, but it fails at tax collection and general government administration. "Tax regulations" were cited as the most problematic factor for doing business by the GCR (World Economic Forum, 2009), and "inefficient government bureaucracy" was the third-most problematic. Switzerland trails the OECD average in each of the following categories of the World Bank's *Doing Business*

Report: starting a business, number of annual tax payments, costs to import, costs to export, and investor protections (World Bank, 2010). While de-centralized government is often a good thing for businesses, if allowed to go unchecked – in tax collection, for example, with varying rates and processes for each commune and canton – it can result in unwieldy, multi-layered bureaucracy.

Finally, Switzerland needs to devote attention to the commercialization of R&D. While Switzerland leads in patenting and R&D spending, "the well-known weakness of Switzerland to fully exploit its advantages in respect to patents and trademarks" results in missed market opportunity (PRO-INNO EUROPE). In a 2009 study, Ernst & Young asked executives, "What does Switzerland need to become a leader of innovation?" Fifty-three percent of respondents chose "Development of a culture of innovation at schools / universities" as first choice (Ernst & Young, 2009). In Switzerland's current educational system, 59% of diplomas awarded are from the vocational education sector, which is co-funded by private companies. Graduates of apprenticeship programs go on to work for their sponsor companies, often in corporate R&D roles. As a result, Swiss corporations do not fully take advantage of "academic" R&D (produced by non-vocational secondary and tertiary educational institutions) (OECD, 2008). Switzerland needs to facilitate the commercial spillovers of the available body of knowledge from both vocational *and* academic educational sectors.

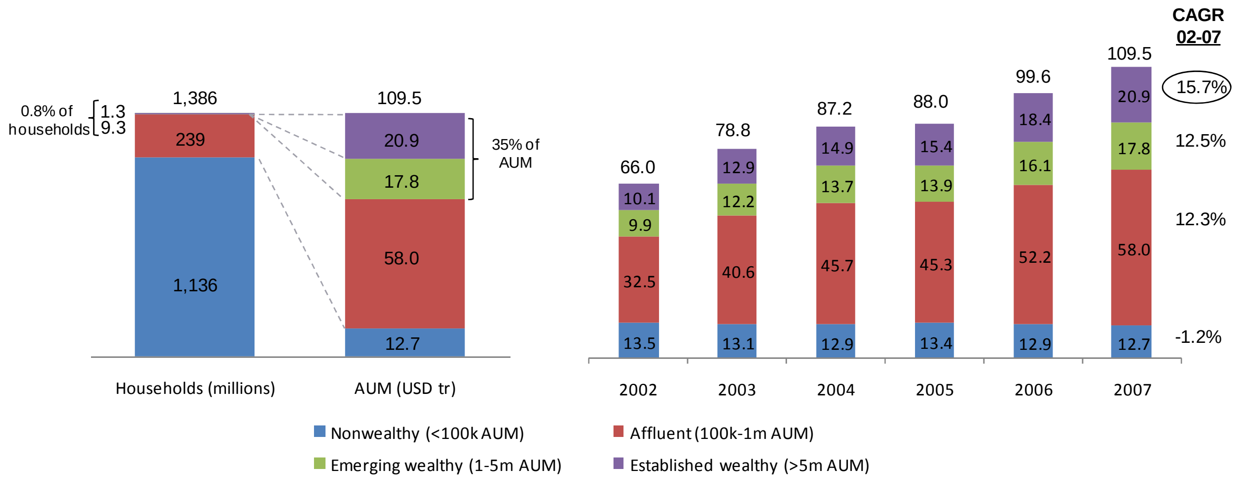
THE SWISS PRIVATE BANKING INDUSTRY

Global Private Banking Industry

In order to best understand how Switzerland has come to a leading position in the private banking industry, we first must analyze where global wealth emanates from and which financial hubs compete for these assets.

The global wealth management pool measured $110 trillion in 2007, 35% of which was in possession of just 0.8% of global households (see below) (BCG, 2008). This segment, comprised of households with personal wealth greater than $1 million, is growing faster than the global wealth pool in general, illustrating the continuing separation of wealth globally.

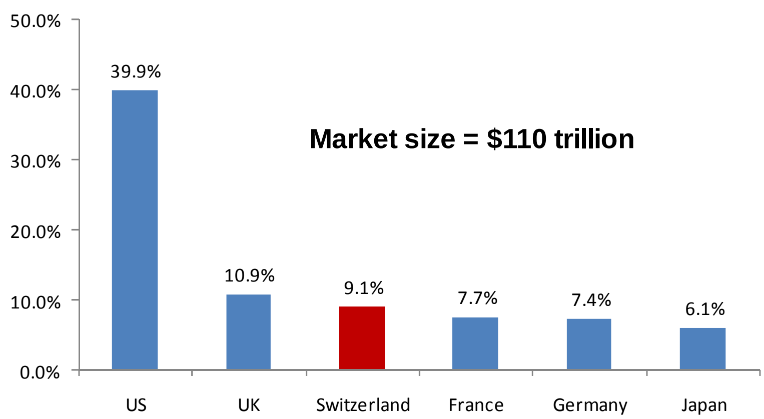
Sources of Global Wealth



Source: BCG Global Wealth (2008).

North America (excl. Mexico) and Europe comprise $77.5 trillion (BCG, 2008), or 71%, of global AUM, and thus have significant influence on the global wealth management industry. The industry is highly concentrated by country, with the United States comprising 39.9% of the global pool, followed by four European countries (UK, Switzerland, France, Germany) and Japan. In total, Switzerland manages $10.0 trillion of the world's wealth, a staggering 20.3 times larger its than 2009 GDP. Conversely, while the US is the largest wealth manager in absolute dollars, controlling $43.8 trillion of global wealth, this amount is only 3.0 times US 2009 GDP (CIA, 2010) (SwissBanking, Wealth Management in Switzerland, 2009). The vast majority of global wealth (93.3%) is managed in on-shore vehicles (SwissBanking, Wealth Management in Switzerland, 2009) focused in large money centers such as New York, London and Zurich.

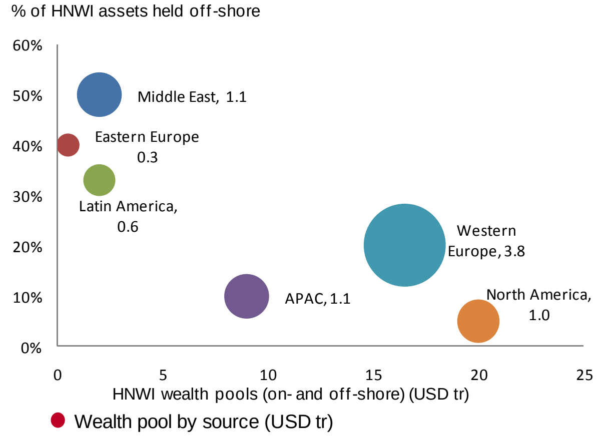
Market Share of Global AUM



Source: SwissBanking (2009).

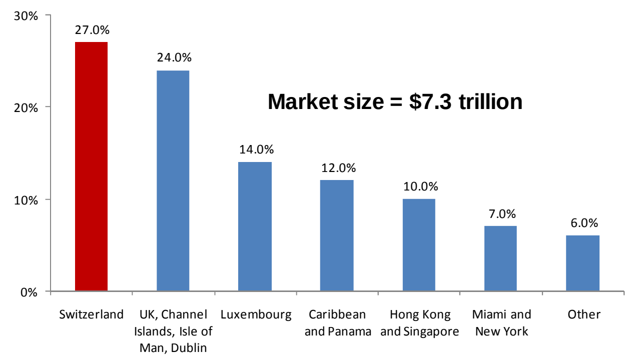
Of the global pool, only 6.7%, or $7.3 trillion, is managed in off-shore accounts, helping individuals and companies maximize privacy, security and tax benefits. Western Europe is home to the most established and reputable off-shore domiciles and comprises 65% of the global off-shore market. Aiding this effort is European citizens' favorable views of off-shore vehicles as an attractive asset allocation. Approximately 20% of all European funds are currently managed off-shore. Funds are principally managed in long-established wealth management hubs in Switzerland, the Channel Islands and Luxembourg.

Off-shore Banking Market Size and Source



Source: Oliver Wyman (2008), The Future of Private Banking: A Wealth of Opportunity?

Off-shore Fund Management Locations



Source: BCG (2009), "The Future of Private Banking: A Wealth of Opportunity?"

Origins of the Swiss Banking Sector and Banking Secrecy Laws

The Swiss Private Banking sector traced its origin back to the 14th century with money exchange and lending activities by the Italian immigrants (SPBA, 2010). The Swiss banks received the first influx of money after the French Revolution due to the stable political and monetary policies in Switzerland. Switzerland developed a stellar international reputation while providing services for the French crown and financing French trade (Geiger & Hurzeler, 2003). Switzerland's success in regional banking did not move toward domestic development until the Industrial Revolution in the mid-nineteenth century, where demand for local financial services increased substantially (Geiger & Hurzeler, 2003). Before and after World War I, as many European countries suffered from high inflation and currency depreciation, the stable Swiss franc attracted many depositors.

One of Swiss private banks' most important early competitive advantages was its banking secrecy laws. Banking secrecy was a prevalent business practice in many cantons before it was codified into federal law. The first known text on bank secrecy dates back to 1713 when bankers from Geneva were the French king's bankers.

Louis XVI even had a Swiss banker, Jacques Necker, as director general of French finances (SPBA, 2010). Swiss banking secrecy was regarded as "self-evident" to the banking community and deeply knit in the "liberal economic principles of the 19th century" (Vogler, 2006). While certain regulations hinted at banking secrecy, such as the 1872 Penal Code of Canton Basel-Stadt and a 1915 "confidentiality rule" for UBS staff, no formal law existed prior to the 1934 Banking Secrecy Law (Guex, 2000). Prior to 1934, bank secrecy was covered by various provisions in the Swiss civil code and the labor code. Federal court jurisprudence fixed bank secrecy firmly in actual practice, so that a client who fell victim to violation of bank secrecy could henceforth obtain damages from the bank. The federal law on banking passed in 1934 clearly stated that bank secrecy fell within the criminal domain. A banker who infringed bank secrecy was subject to imprisonment, thus reinforcing a depositor's protection in the private sphere. Thus, secrecy was seen as a fundamental right in Switzerland and did not develop for purposes of encouraging tax evasion.

General political stability and direct voting system in Switzerland also contributed to the flourishing private banking industry. Switzerland ranks as second in the world in political stability, ahead of its competitors such as Singapore, Hong Kong and the U.S. (Credit Suisse, 2009). Furthermore, the direct voting system requires any change to the banking secrecy laws to be passed by a double majority both of the votes and of the states in an obligatory referenda vote. As of 2008, 80% of the Swiss population still supported the banking secrecy laws (Economist, 2008).

Mapping the Swiss Banking Cluster

We define the "Swiss Private Banking sector" as either banks that are Swiss-owned and Swiss-headquartered entities, or Swiss-managed autonomous units of foreign-owned entities. Currently, the two big Swiss banks UBS and Credit Suisse command a market share of 50% in Switzerland. Approximately 150 subsidiaries of foreign banks also play a key role in the Swiss financial system with a market share of 20 %. Ninety private and cantonal banks (banquiers privés) have the remaining share of 30% (See Appendix 1).

These players follow different business models that can be grouped into three broad categories: "pure player" private banking firms; the universal and cantonal banks with private banking businesses; and the predominantly global "integrated hybrids" with stronger cross-fertilization of clients, products and services. The Swiss banking system is based on the model of universal banking. This means that banks can provide all banking services. Unlike the United States, who banned universal banking with the Glass-Steagall Act (in force from 1933-1999), Swiss regulation allowed for banks to develop cross-product relationships with their clients. Therefore, all three categories of Swiss banks could offer an integrated and proprietary suite of services ranging from distribution to transaction and reporting (see below). Swiss banks can manage wealthy individuals' money while also advising the client on business issues and providing access to public financing options.

Product Offerings of Traditional Swiss Banks

Distribution	Wealth planning	Customizing products	Transaction & reporting
• Prospect contacting and client acquisition • Needs analysis • Sales of services and products (including stocks and bonds) • Maintaining of relationship	• Investment planning • Financial planning • Tax planning • Retirement planning • Estate planning	• Bank accounts, custody accounts, retirement accounts • MM, FX, bonds, stocks, futures, and options • Loans • Mutual funds • Discretionary asset Mgmt • Structured products • Alternative investment • Insurance products • Trusts, foundations	• Funds transfer • Clearing & settlement • Custody • Brokerage • Collateral management • Document handling • Reporting

Source: Hans Geiger, Harry Hürzeler, "The transformation of the Swiss private banking market"

Swiss private banks benefit tremendously from a highly developed financial system. Most notably, UBS and Credit Suisse are consistently among the most successful investment banks in for both Initial Public Offerings ("IPO") and Merger and Acquisitions ("M&A") activities (See below for global IPO and M&A ranking for first half of 2009). Switzerland also has a competitive insurance sector that accounts for 4.8% of national output (SwissBanking, 2006). The Swiss Interbank Clearing ("SIC") operates a sophisticated interbank payments system in Swiss Francs. Since Switzerland is not part of the Euro zone, SIC developed the euroSIC system which enables online and real time euro payments between Switzerland and the EU. Furthermore, Switzerland enjoys an advanced global custody and fiduciary sector. The volume of assets under fiduciary contracts totaled CHF 316 bn as of 2005. About four-fifths of all fiduciary money originates from outside Switzerland (SwissBanking, 2006).

Top 10 Book Runners for Global IPO (1H09)

(In USD million)

	Proceeds	# of Issues
1. China International Capital Co	8,363	3
2. Morgan Stanley	5,206	26
3. Bank of America Merrill Lynch	4,639	18
4. CITIC	4,059	4
5. JP Morgan	3,576	16
6. Credit Suisse	3,448	17
7. Goldman Sachs & Co	3,412	13
8. UBS	3,329	11
9. Citi	2,039	12
10. Orient Securities Co Ltd	1,605	1

Source: Reuters.

Top 10 Book Runners for Global M&A (1H09)

(In USD million)

	Proceeds	# of Issues
1. Goldman Sachs	343	112
2. Morgan Stanley	331	119
3. JPMorgan	303	118
4. Citi	245	112
5. Deutsche Bank	213	100
6. Bank of America Merrill Lynch	180	94
7. Lazard	172	82
8. UBS	170	121
9. Credit Suisse	161	97
10. Barclays Capital	111	33

Source: Financial Times.

Swiss private banking, renowned for its quality services and consistently ranking in top 3 of global private bank ranks according to Euromoney, has become one of the few options that sophisticated clients seeking quality service may choose from. In its 2009 strategy presentation, Julius Baer Group mentioned that approximately 40% of the value proposition of Swiss private banking revolved around the quality and comprehensiveness of its service. “There is no other booking center today that can offer the same level of access across asset classes and geographies like Switzerland,” said Boris Collardi, CEO of Julius Baer Group (Strategy Presentation of Julius Baer Group Ltd. and GAM Holding Ltd. - Transcript).

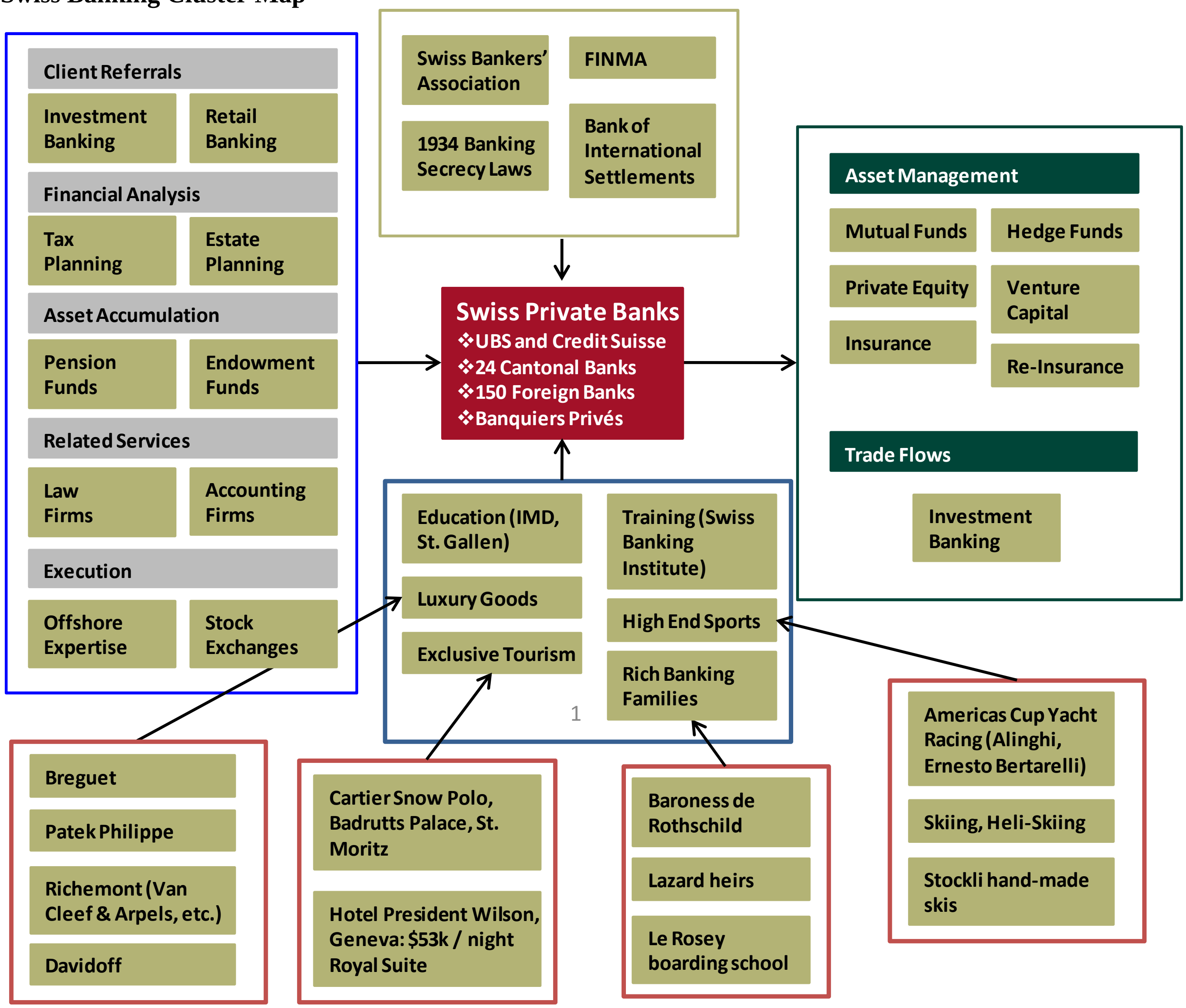
Swiss banks are regulated by the Swiss Financial Market Supervisory Authority (FINMA) and the Federal Banking Commission. Federal laws fix a framework of activity for banks and other traders in securities. Examples of these laws include the federal retail banking law, the federal law governing stock markets and securities trading, the federal law on collective capital investments and the federal law on money laundering. The industry also has a long tradition of self-regulation. With the support of the Swiss Bankers Association, Swiss banks draw up binding codes of conduct which define what constitutes good industry practice or ethically correct management. One example of a code of conduct is the Agreement on Due Diligence (CDB), which provides standards for diligence prior to engaging external parties, including partnerships and clients. This legislation is similar to US laws on Anti-Money Laundering (AML) and Know Your Customer (KYC). In turn, FINMA monitors how well banks comply with these codes of conduct. Ultimately, in lieu of a direct enforcement authority (such as the SEC), compliance with industry guidelines is voluntary, however FINMA can discretionarily impose sanctions on institutions for code violations (SwissBanking, Self-Regulation, 2010).

The Swiss private banking sector enjoys ample sources of talent and draws substantial human resources from various educational institutes and specialized training programs. Education for bankers starts with basic commercial banking training at the secondary education level. This commercial training lasts three years, and is part of the Swiss Bankers Association's bank apprenticeship model. At the tertiary level, universities offer competitive programs in economics and law which are directly applicable for banks and financial institutions. Swiss universities are also strong in mathematics and IT. Students can also choose a highly specialized course in Banking and Finance HFBF, a practice-oriented course of study that results in a federal diploma in Banking and Finance HF. On the post-graduate level, Switzerland is home to two highly competitive MBA programs, IMD and St. Gallen.

Switzerland is also home to many other professional services industries including law, tax planning and consultancy, accounting, and other investment services. Switzerland's traditionally favorable monetary and fiscal policies, such as lower inflation, interest rates, corporate and personal tax rates than most European countries, have given rise to a very sophisticated asset management industry. The Swiss mutual fund industry is also one of the most competitive in the world. Many world renowned venture capital and private equity firms such as HBM BioVentures and CapVis are headquartered in Switzerland. Switzerland ranks top 5 in Europe and top 20 worldwide in terms of attracting high tech capital funding (Venture Valuation, 2010).

Steady flow of investment opportunities for private banking capital also originates from the high level of innovation within top research institutions such as the European Organization for Nuclear Research, Ecole Polytechnique Federale de Lausanne, Swiss Federal Institute of Technology, and the Biocenter. Presence of major multi-national corporations (Nestle, ABB, Novartis, Roche) provides experienced management pool, R&D spin-off companies and capital.

Swiss Banking Cluster Map



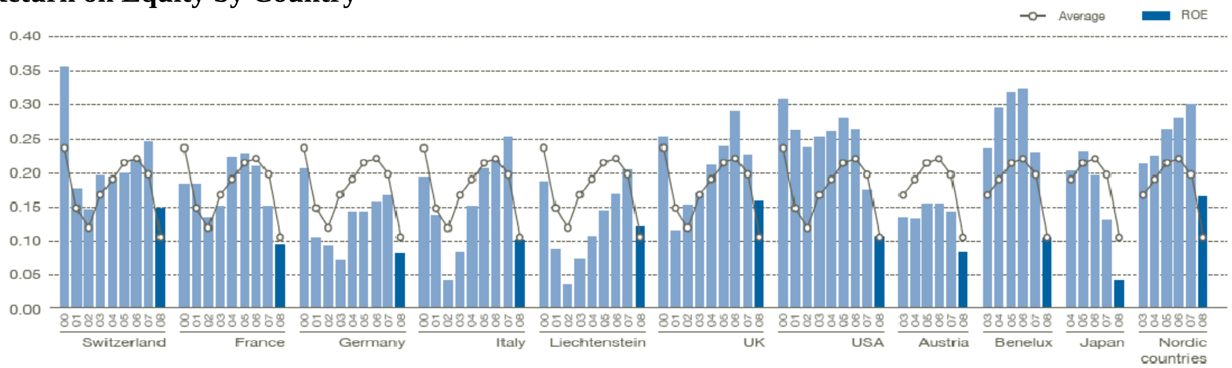
Performance of the Swiss Private Banking Sector

The Swiss Private Banking sector is highly competitive. In terms of global asset management, Switzerland commands a 9.1% and ranks third in the world after the U.S. and U.K. The Swiss private banks have continued pulling in new money over the past three years (in aggregate), despite the financial crisis and controversy over bank secrecy. UBS may have suffered outflows of 83.4 billion Swiss francs ($77.12 billion) between 2008 and 2009, but most Swiss private banks continued to report inflows. For example, Bank Sarasin saw net inflows up 17% in 2008 to 14.5 billion francs. That suggests some money pulled from UBS was transferred to other Swiss banks.

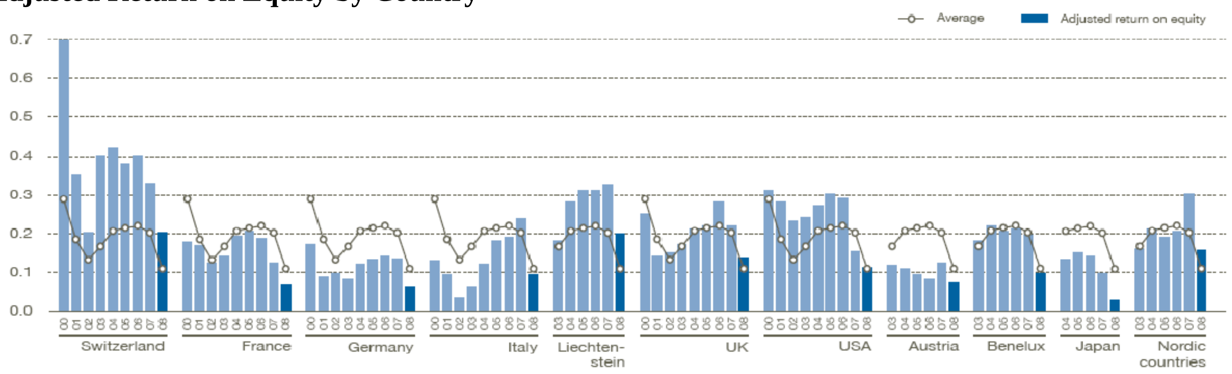
The Swiss banking sector is of great significance to the Swiss economy. The sector employs 6% of the country's working population. They generate more than 8% of gross domestic product and account for 12% of total exports. 12-15% of all federal, cantonal and municipal tax receipts also come from the financial sector which pays CHF 14-16 bn each year in direct and indirect taxes (SwissBanking, The Economic Significance of the Swiss Financial Centre, 2009). The balance sheets of Switzerland's banks totaled $3.6 trillion francs as of 2007. This is over six times the country's national income. The balance sheets of America's banks amount to about half the US national income.

Additionally, Swiss banks have demonstrated their ability to be some of the most profitable institutions in the world, exhibiting steady, profitable performance even through difficult business cycles. On an adjusted return on equity basis (taking into account different capital requirements across countries), Switzerland outperforms its peers with a 20% Adj. ROE in 2008 (Birchler & Cocca, 2009).

Return on Equity by Country



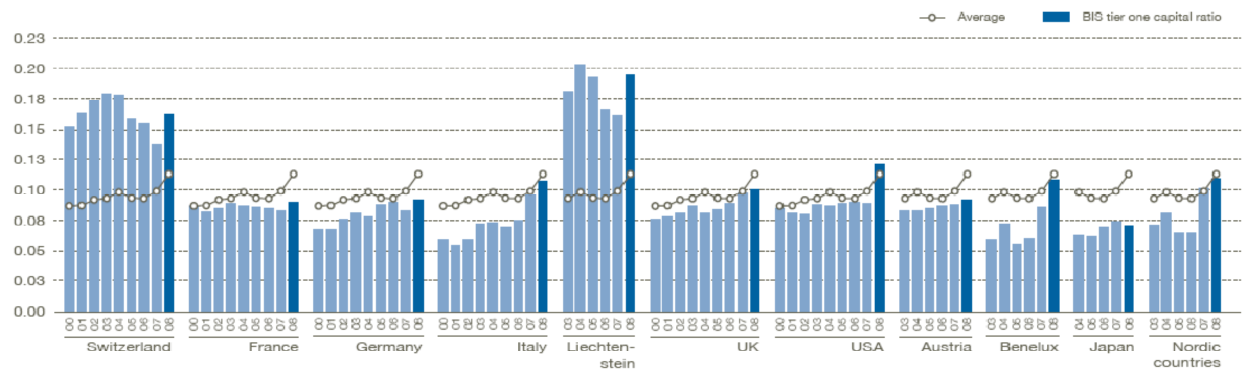
Adjusted Return on Equity by Country



Source: The International Private Banking Study 2009, Swiss Banking Institute, University of Zurich.

Swiss banks are relatively well-capitalized with a Tier 1 Capital Ratio of 17%, comparing to American banks' 12% and Germany's 9% in 2008[1]. This is due to Swiss regulation, which provides more detailed rules than Basel accords, closing loopholes and causing Swiss banks to maintain higher capital ratios (Rime, 2000). Major Swiss banks consistently receive high marks for soundness from the main credit rating agencies. The Swiss capital market is counted among the most active in the world.

Average BIS Tier 1 Capital Ratio by Country



Source: The International Private Banking Study 2009.

Swiss banks have a strong international orientation. Foreign assets make up about 35% of the aggregate balance sheet total of Switzerland's banks (over 50% if trusts are included), a much higher proportion than the banks in the USA (10%), Japan (15%) or Germany (20%) (Swiss Bank Account, 2010). Switzerland is an attractive location for foreign bank branches as well. In 2007, a total of 356 banking institutions and finance companies were operating in Switzerland, with 150 of these banks headquartered abroad. Effectively, Switzerland's position as global leader in wealth management, and more specifically off-shore banking, has made it an attractive location for all major banks.

In the Swiss Banking Institute's 2009 study of the global private banking industry, Switzerland ranked second in overall performance behind Liechtenstein based on the Institute's analysis of eight analytical metrics. While Swiss cost/income ratios were relatively high due to an emphasis on high touch customer service and a need to pay for talented money managers, Switzerland excels on scale. Swiss banks are able to manage vast amounts of wealth with fewer individuals, allowing the banks to generate substantial income.

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[1] Please note that 2008 has abnormally high capital ratios due to industry-wide capital raises and government bailouts due to the financial crisis.

Global Private Banking Rankings

	Adjusted gross margin	Return on equity	Adjusted return on equity	Cost/income	Total revenue per employee	Gross profit per employee	Average AUM per employee	Stakeholder income per employee	Overall ranking
Switzerland	4	3	1	7	2	5	1	1	**2**
France	2	8	9	8	8	6	8	10	**7**
Germany	5	10	10	10	11	10	5	9	**11**
Italy	7	7	7	3	9	8	10	5	**6**
Liechtenstein	8	4	2	1	1	1	2	2	**1**
United Kingdom	3	2	4	6	5	7	3	7	**4**
USA	9	5	5	11	7	11	7	4	**7**
Austria	10	9	8	4	10	9	4	6	**9**
Benelux	6	6	6	5	4	3	6	3	**5**
Japan	11	11	11	9	3	4	9	11	**10**
Nordic Countries	1	1	3	2	6	2	11	8	**3**

Source: The International Private Banking Study 2009.

The Cluster Diamond

Factor Conditions

Swiss banks have always excelled in customer service, using a high-touch business model that dates back to the nineteenth century when Swiss banks chose to establish branches in European money centers such as Paris, London and Berlin. Given the highly personalized nature of their business, skilled human capital is a key asset required for sustaining competitive advantage. According to International Institute for Management Development (IMD), Switzerland ranks highest in terms of availability of skilled labor (Switzerland Trade & Investment Promotion, 2009). Switzerland has four official languages – German, French, Italian and Romansh – and English is widely spoken and is gaining ground as the primary language of business in the country. Switzerland has had a history of attracting talented foreigners as captains of industry, with particularly strong talent inflows during world wars. Immersed in a variety of cultures, the Swiss grow up in an international environment and are well equipped to serve global clients.

Switzerland has also developed into a prime headquarters location for multinational companies. With its high quality of life, central location and competitive taxes, it has attracted over 180 regional headquarters of large foreign companies in the past 10 years (McKinsey & Company, 2008). These headquarters house a huge pool of rich senior executives who are key sources of clientele of the private banking sector.

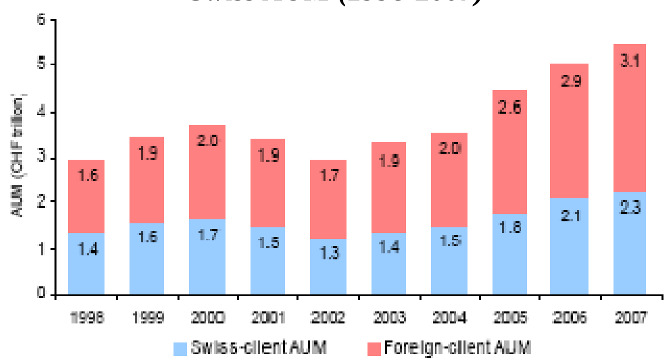
Reputation also serves as an important input for the cluster. The Swiss private banks are known for their security and reliability for centuries. The Swiss people also have the reputation of being punctual and polite, both important characteristics for a service-oriented industry.

Switzerland's strong telecommunications infrastructure also helps facilitates global client servicing. According to 'The Economist', Switzerland has the world's best telecommunications infrastructure, with 100% broadband coverage. Swisscom, leading telecommunications provider in Switzerland, is expanding FTTH network in Zurich, Basel and Geneva, important private banking centers of the country. The country's long history in private banking has established a strong global reputation for the industry. For example, Lombard Odier & Cie, a private bank founded over 200 years ago in 1796, has built such a strong reputation for innovative and quality private banking services that Jules Verne in his 1865 science fiction 'Earth to the Moon' portrayed the bank as the financier of the expedition to the moon (Lombard Odier, 2010).

Demand Conditions

Domestic and foreign demand for Swiss private banking are both very strong. Domestic client AUM has traditionally constituted over 40% of total AUM in Swiss private banks.

Swiss AUM (1998-2007)

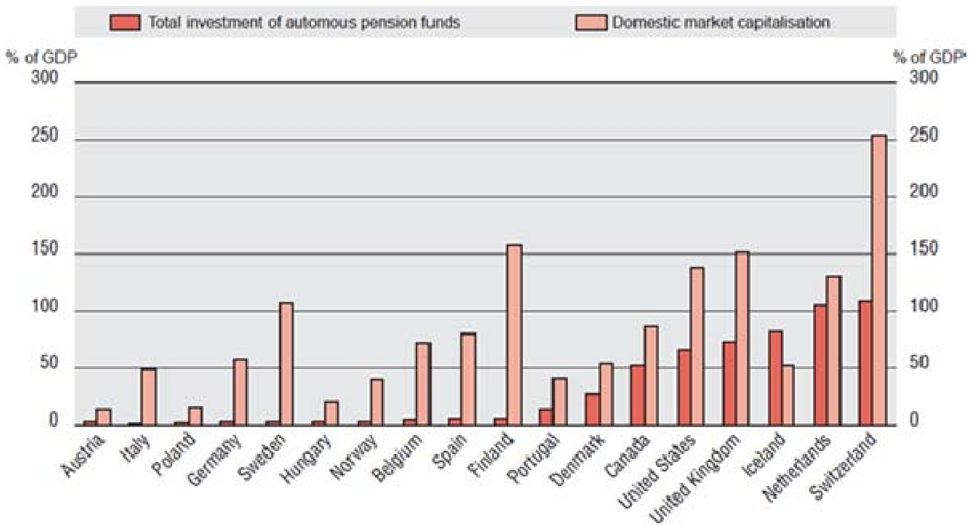


Source: Wealth Management in Switzerland.

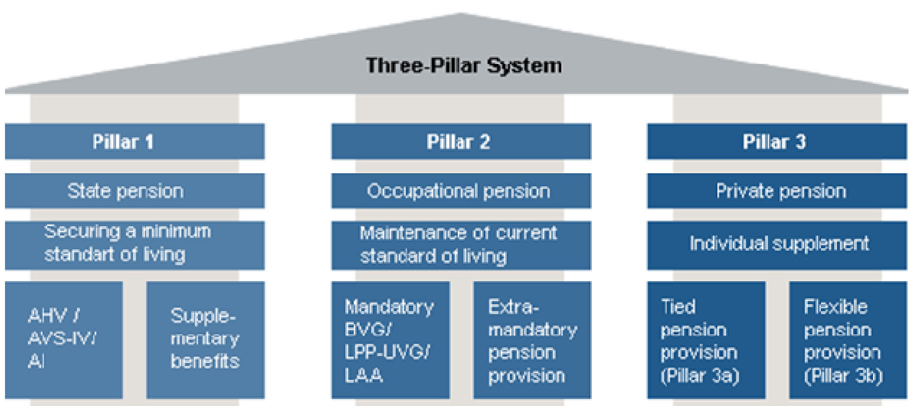
The Swiss compulsory pension system helped create a robust local need for wealth management. Switzerland enjoys a high savings rate, and an average Swiss family spends over 22% of its household budget on insurance (Swiss Federal Department of Foreign Affairs). Swiss pension funds are relatively large in comparison to other OECD countries. The Swiss pension system, started in 1985, is based on three pillars: state provision on a pay-as-you go basis, occupational provision on a fully-funded basis, and private voluntary pension plans. The so-called individual occupational pension scheme (3rd pillar) subsidizes private pension savings by tax breaks.

Contributions are deducted from taxable income and only taxed at the time of payment. Interest on contributions is not taxed. As a result, this third pillar contributes to increased local demand for private wealth management. Moreover, as previously mentioned, Switzerland is home to some of the wealthiest individuals of the world as well as top executives of Swiss-headquartered companies. These individuals have a sophisticated demand for private banking, fueling the local private banking business.

Pension Fund AUM vs. Stock Market Capitalization



Swiss Pension Three-Pillar System



Related and Supporting Industries

Swiss private banking benefits hugely from Swiss scale in other areas of finance. Unlike smaller tax havens and dependencies of other countries which have been accused of ‘inventing’ laws to benefit from capital flight, Switzerland has been a long-standing trading hub and center for financial settlements. Basel, home to Bank for International Settlements, is the birth place of two of the most important international banking regulations

BASEL I and BASEL II. Switzerland's sophisticated transportation infrastructure, including world-class customs, freight forwarding and merchandise inspection systems, has also established Switzerland as a trusted international hub and centre of capital accumulation.

Home to many NGOs such as the Red Cross, United Nations and World Trade Organization, Switzerland hosts a total of 29 international organizations. These international organizations are active in fields as varied as humanitarian aid, commerce, human rights, the environment and sustainable development, training and education, peacekeeping and security meteorology, intellectual property, nuclear research, health, telecommunications and labor. Their presence and activities are a stamp of approval and guarantee of Switzerland's global authority over neutrality, political stability and international regulations, an ideal environment for private banking.

Switzerland's sophisticated tourism industry not only helps attract the wealthiest individuals around the world to the Alpine nation's private banking firms, but also cultivates Switzerland into a multicultural and guest friendly country. Used to serving tourists from around the world, Swiss are highly equipped in training international workforce, multilingual capabilities and cultural openness, qualities that are important to the private banking industry at Switzerland. Relationship managers are frequently seen in ski resorts discussing portfolio allocations with their clients.

Switzerland has always been famous for its boarding schools, which has become home to generations of European royalties and families. Students live in an international community to which each contributes through his or her own language, culture and religion (Swiss Learning). International students bring familial wealth with them, and open accounts locally at Swiss banks when they study in the country, cultivating generations of Swiss banking habits.

<u>Context for Firm Strategy and Rivalry</u>

The Swiss private banking sector is both highly personalized and fragmented. As a result, there is vigorous competition among local companies, which has fostered innovation. The government's openness to foreign investment invited foreign banks into the country, further increasing competition and innovation. At the same time, since many leading private banks have been owned by the same families for generations, these families often have strong ties with one another, facilitating knowledge spillovers and best practice sharing.

However, since the industry has been established for such a long time, firms face the difficulty to flexibly adjust to changing market demands.

RISKS, RECOMMENDATIONS AND CONCLUSION

Risks facing the Swiss Private Banking Sector

Regulatory and Legal Risk

Switzerland's legal protection on client identity and its lenient tax laws are waning in importance as a competitive advantage. Switzerland's conforming to OECD standards also puts banking secrecy laws under increasing pressure. UBS's recent lawsuit and fine by the U.S. regulators further prove that in an increasingly interconnected global economy, regional and national policies are not sufficient as formidable barriers to entry when capital flows among countries freely.

Human Capital Risk

Switzerland is facing increasing challenges to provide the private banking industry with sufficient talent due to its small population size. A growing gap is developing between the demand for, and supply of, Swiss professionals on the private banking job market. To fill the gap, import of foreign talent is necessary. However, the current labor and immigration laws are not conductive to attracting and retaining foreign talent. It is difficult to individuals to receive short and long-term work visas.

Competition Risk

One of the most profound and long term threats to the Swiss private banking system is increasing competition from other money management centers around the world that have emerged in recent decades. Substantial wealth creation in China and India resulting from exponential growth in local stock markets has helped Hong Kong and Singapore grab market share in global off-shore funds.

Recommendations for the Swiss Private Banking Sector

The Swiss government should facilitate the presence of foreign banks in Switzerland. Foreign banks were an important source of growth for the sector post-WWII, and the Swiss government should increase the attractiveness of Switzerland as a host country for private banking services. An increase in the top tier international banking institutions choosing Switzerland as their private banking headquarters would provide (1) reinforcement of the Swiss banking reputation, (2) an influx of international funds, (3) an increasing demand for highly-trained workers and (4) steady stream of high end tourism.

In order to sustain its stellar banking reputation, Switzerland should raise its bank regulatory standards as well as client disclosure standards. In this era of heightened scrutiny, the banking sector should make an effort to avoid embarrassing scenarios such as terrorist funds funneled through the country, or widespread tax fraud transacted by Swiss-based institutions.

With its recent adoption of OECD Article 26 governing tax conventions among member countries, Switzerland must now proactively alter its existing private banking business model. Tax authorities of other OECD nations understandably want to stem their citizens' tax evasion via Swiss accounts, but Switzerland still staunchly adheres to bank privacy. One solution to reconcile this disconnect, endorsed by the Swiss Bankers Association, would be a flat tax on all income generated by Swiss assets which are held by foreign-domiciled citizens. The tax revenues generated would then be anonymously transferred to the tax authority of the foreign-domiciled citizen, so that his or her tax obligations were fulfilled and thus it would not be necessary to report Swiss assets, thereby upholding bank secrecy.

At the same time, Switzerland has a unique opportunity to capitalize on Europe's recent follies by encouraging expansion of the asset management cluster. Alternative asset managers (hedge funds and private equity firms) are seeking refuge from a deluge of regulation coming out of the UK and other EU countries post-financial crisis. Switzerland has the opportunity to attract world-class financial talent by continuing progressive corporate tax policy. Most importantly, Switzerland must lower its labor barriers to accommodate this shift, developing progressive visa policies to allow for talent emigration.

On the regulatory front, the Swiss government should make FINMA a stronger institution. After providing $50 billion to bail out UBS, the Swiss government is justifiably concerned about the stability of the financial system. UBS and Credit Suisse alone comprise 50% of the sector, and future financial instability threatens the overall Swiss economy. FINMA should therefore expand its oversight and enforcement powers to guard against catastrophic risk. Scope should include allowable leverage and regulatory capital.

With these proposed expansions to the asset management and regulatory sectors, developing a deep bench of domestic talent is critical. The apprenticeship program has helped bring a constant supply of labor; however the industry now needs more highly educated individuals who have graduated from tertiary education programs. Possible solutions to address this need include establishing a third major business school, or providing partial government subsidies (i.e. loan forgiveness) to Swiss tertiary graduates who stay and work in Switzerland.

Conclusion

The success story of the Swiss private banks is an interesting enigma where a relatively small country dominates in a competitive, vastly important financial sector. We believe that Switzerland's macroeconomic stability, legal and regulatory framework, combined with a series of favorable historical events ultimately lead to the long-lasting success of its private banking industry. However, as the world changes and wealth is increasingly created in emerging markets, Switzerland need to explore beyond regulatory and legal regions to remain competitive.

Appendix 1

Top 50 Swiss Private Banks
by AUM, 2007 figures (in CHF millions)

	Bank	AUM		Bank (cont'd)	AUM
1	UBS	2,298.0	26	JP Morgan	30.5
2	Credit Suisse	1,554.7	27	SG Private Banking	30.3
3	Julius Baer	405.0	28	Citibank	30.0
4	Pictet	270.0	29	HSBC Guyerzeller	29.0
5	HSBC Private Bank (Suisse)	186.5	30	Banque Cantonale Lucernoise	28.8
6	Lombard Odier Darier Hentsch	177.0	31	Mirabaud	25.0
7	UBP	136.4	32	Merrill Lynch Bank Suisse	24.3
8	Clariden Leu	129.0	33	ABN Amro	23.4
9	Banque Cantonale de Zurich	119.2	34	Les Fils Dreyfus & Cie Banquiers	23.3
10	Raiffeisen	117.9	35	Banque Jacob Safra	22.7
11	Banque Privee Ed. De Rothschild	100.3	36	Banque Cantonale Bernoise	20.7
12	EFG	98.4	37	Wegelin	20.5
13	Banque Cantonale Vaudoise	84.3	38	Banco Santander	18.3
14	Sarasin	83.0	39	Barclays Bank	17.4
15	Vontobel	79.5	40	Banque Coop	16.7
16	BSI	63.0	41	Fortis	15.5
17	RBS Coutts	61.0	42	Morgan Stanley	15.3
18	Deutsche Bank	56.1	43	Banque Conatonale de Geneve	14.0
19	Credit Agricole	56.0	44	Schroder & Co	13.8
20	Banque Cantonale de Bale	44.8	45	Mirgros Bank	13.4
21	BNP Paribas	43.0	46	Dresdner	12.8
22	Banque Cantonale de Saint-Gall	40.6	47	Goldman Sachs	12.7
23	Banca del Gottardo	36.0	48	ING	12.6
24	Lloyds	33.0	49	BHI-Bank Hapoalim Intl.	11.3
25	Syz	30.7	50	Bordier	10.0

Top 50 Swiss Private Banks by Classification
2007 figures (in CHF millions)

		AUM	% of Top 50
Universal Banks			
1	UBS	2,298.0	
2	Credit Suisse	1,554.7	
		3,852.7	57%
Foreign Bank			
5	HSBC Private Bank (Suisse)	186.5	
10	Raiffeisen	117.9	
16	BSI	63.0	
17	RBS Coutts	61.0	
18	Deutsche Bank	56.1	
19	Credit Agricole	56.0	
21	BNP Paribas	43.0	
23	Banca del Gottardo (sold to BSI)	36.0	
24	Lloyds	33.0	
26	JP Morgan	30.5	
27	SG Private Banking	30.3	
28	Citibank	30.0	
29	HSBC Guyerzeller	29.0	
32	Merrill Lynch Bank Suisse	24.3	
33	ABN Amro	23.4	
35	Banque Jacob Safra	22.7	
38	Banco Santander	18.3	
39	Barclays Bank	17.4	
41	Fortis	15.5	
42	Morgan Stanley	15.3	
44	Schroder & Co	13.8	
46	Dresdner (sold to LGT Group)	12.8	
47	Goldman Sachs	12.7	
48	ING	12.6	
49	BHI-Bank Hapoalim Intl.	11.3	
		972.4	14%

		AUM	% of Top 50
Swiss Private Bank			
3	Julius Baer	405.0	
4	Pictet	270.0	
6	Lombard Odier Darier Hentsch	177.0	
7	UBP	136.4	
8	Clariden Leu	129.0	
11	Banque Privee Ed. De Rothschild	100.3	
12	EFG	98.4	
14	Sarasin	83.0	
15	Vontobel	79.5	
25	Syz	30.7	
31	Mirabaud	25.0	
34	Les Fils Dreyfus & Cie Banquiers	23.3	
37	Wegelin	20.5	
40	Banque Coop	16.7	
45	Mirgros Bank	13.4	
50	Bordier	10.0	
		1,618.2	24%
Cantonale Bank			
9	Banque Cantonale de Zurich	119.2	
13	Banque Cantonale Vaudoise	84.3	
20	Banque Cantonale de Bale	44.8	
22	Banque Cantonale de Saint-Gallen	40.6	
30	Banque Cantonale Lucernoise	28.8	
36	Banque Cantonale Bernoise	20.7	
43	Banque Cantonale de Geneve	14.0	
		352.4	5%

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