

**Did the Globalization of Finance
Undermine Financial Stability?
Lessons from Economic History**

By

Hugo Banziger

SPECIAL PAPER 211

LSE FINANCIAL MARKETS GROUP PAPER SERIES

June 2012

Hugo Banziger is a co-chair of the Financial Stability Board's "Enhanced Disclosure Task Force" (EDTF). Previously, he was a member of the Management Board and the Group Executive Committee of Deutsche Bank since 2006. As Chief Risk Officer, he was responsible for Risk Management, Legal, Compliance, Corporate Governance, Corporate Security as well as Treasury. He studied Modern History, Law and Economics at the University of Berne, where he earned his doctorate. He is a member of the Supervisory Board of Deutsche Postbank AG, EUREX Clearing AG and EUREX Frankfurt AG as well as a member of the Board of Directors of EUREX Zürich AG. Any opinions expressed here are those of the author and not necessarily those of the FMG. The research findings reported in this paper are the result of the independent research of the author and do not necessarily reflect the views of the LSE.

Did the Globalization of Finance Undermine Financial Stability?

Lessons from Economic History

Dr. Hugo Banziger

Information Technology, modern communication and liberalization of markets were the primary forces, which drove the globalization of finance and integration of financial markets over the last 30 years. As a result, the financial industry is today the biggest spender on IT and the majority of data pumped around the globe relates to finance. Indeed, financial markets are truly global and integrated. It is thus no surprise that the crisis of 2007, which had its origins in the US residential mortgage market, spread across the globe. It will not be the last one to do so either. The question this paper tries to answer is whether the globalization of finance contributed to financial instability. By looking at several waves of financial integration, I try to analyze what it meant for the people at the time, whether it affected financial stability and when it did, how societies responded. That domestic imbalances can lead to financial instability is obvious. The collapse of the German Mortgage Banks in the late 1990 resulting from a government sponsored real estate bubble after the fall of the Berlin Wall is a less well known but good example. Given the magnitude of the question, my answers are summary in nature.

Trade Finance – Netting The Risk

As we know from archeology, long distance trade in metals, grain, wine, olive oil and spices started during the Sumer Empire and the early Pharaoh kingdoms. We know from fragmented records that these early traders employed their families to conduct their business. So far, no evidence survived as to how these trading activities were financed. The first clues date from the grain trade in the Roman Empire, even though

the records are few. To manage and finance the import of wheat from Sicily and Egypt, traders maintained a large network of agents, which were mostly relatives. These agents not only purchased and shipped grain, they also acted as clearers in order to minimize the risk of payment loss (pirates, loss of ship, fraud). Receivables were netted within the widespread family framework.

After the collapse of Rome, trade and related financing disappeared from the western part of the Mediterranean but survived in the Byzantine Empire from where it re-emerged with the crusades first in Venice and Genoa, later in Renaissance Italy. Banking families like the Medici were organized along family lines with their branches in Europe typically run by family member. Even Germany's Fugger who started with manufacturing and trading textiles before becoming bankers, were a family bank. Whilst both houses, the Medici and the Fugger, eventually collapsed because of excessive lending to Emperor and Kings, their trade finance business was as self-liquidating as it remains today. It reduced the risk to the system by using gilts thereby netting payments and drastically reducing the amount of money, which had to be physically shipped. The invention of gilts introduced the risk of bank failure to society but with equity typically making up 1/3 to 1/2 of the balance sheet, this risk was well buffered and affected only wealthy families. Albeit bank runs did happen at the time, they were usually caused by government defaults on bank debt.

Joint Stock Companies – pioneers of foreign investments

In the 17th century, Europe started the long process of transformation from an agricultural to a modern, monetized society. Some important steps were the creation of the first stock exchanges in Antwerp, the establishment of Joint Stock companies such as the Dutch and the English East India Companies and of Government Debt Offices (Bank of England). At the exchanges, which spread quickly to Amsterdam and

London, physical commodities, government debt and the shares of the few stock companies were traded. It was this innovation that made the South Sea Bubble in England and the Mississippi Bubble in France (Banque Royale) possible. Based on hyped-up promises of future trading profits in South America and Louisiana, the companies issued stock or bank bills beyond their asset capacity. Some of the proceeds went invested abroad. But most were used to purchase government debt to finance the perpetual wars between Spain, France and England. In 1720, both companies spectacularly collapsed leaving the equity and notes holders with huge losses. Before joint stock companies came into existence, banks were owned by a few rich families. The combination of joint stock structure and exchange trading broadened ownership and transferred risk to the wider society. There were now merchants, scientists (Newton!), middle ranking government officials, town mayors and village elders among the investors. Not surprisingly, the collapse of these two companies had wider political ramifications. To restore confidence in markets and the value of money, both the French and the English government had to intervene and resolve these companies. The public registration for stock companies became mandatory. For the first time, the public demanded proper accounting and disclosure standards. It was also a novelty that a paper currency (bank bills of the Banque Royale) had to be depreciated. Joint stock companies were established to reduce the risk of individual investors and mostly achieved this goal. However, it is fair to say that the concept of a public company promising future cash flows added a new systemic risk to the financial system. Over the next 200 years, there were several more bubbles, which had their root cause in hyped-up investment schemes, manipulation of accounts, missing or misleading disclosure and lack of governance/supervision. By and large, the world had to wait for the Securities and Exchange Act in 1934 until these issues were fully addressed. Regrettably, the SEC framework did not keep pace with the

financial innovation over the last 30 years. The disclosure rules of 1934 proved inadequate for modern banks, derivatives and securitized products. A regulatory framework, which does not remain in sync with market development and innovation, will become ineffective.

Savings Banks – Unexpected Contributors to Systemic Risk

The industrial revolution in the 18th century did not only transform the way we manufacture and consume, it also had a profound impact on the use of money. In an agricultural, self-subsistent society, the circulation of money was limited. Farmers did not need a lot of money. All this changed with large concentration of industrial workers in towns. They got a salary and had to buy their food and clothing in the market. Society was monetized. In the absence of a safety net, delaying consumption was the only way to protect against rainy days. The safety of the resulting savings thus became of paramount importance. Within a few years of factories being built, savings associations emerged everywhere in Europe. Traditional banks were neither present in these new industrial centers nor capable of handling small deposits. As traditional banks failed in economic downturns, so did savings banks. But the consequences were different. Suddenly, large numbers of less well off people were affected losing their protection against the avarices of life. Thus, protection against individual risks created a new systemic risk. Also, since the rise of savings banks coincided with the development of capital markets, savings associations also invested in bonds of large foreign infrastructure projects. We are well aware of the losses resulting from large infrastructure projects such as the Suez and Panama Canal, various railway schemes in Africa and the Americas, or even the Gotthard tunnel in Switzerland. That the emancipating working class demanded correcting political action is thus no surprise. Indeed the first, albeit timid investment restrictions for savings banks emerged in the middle of the 19th century. In many European countries, these

restrictions (“investment rules for widows and orphans”) were a nascent form of banking supervision. The safety of our citizen’s deposits remains of paramount importance to this day. Both, the collapse of the Swiss “Spar & Leihkasse Thun” in the mid 1990 or the more recent failure of “Northern Rock” illustrate the point. The debate of how to best protect a nation’s deposits has been re-opened in the UK by the Vicker Commission’s recommendation to segregate deposit-taking activities from other banking operations. Before the Glass-Steagall Act was suspended in 1999, the United States not only separated commercial, deposit taking banks from investment banks but also went a step further by establishing the Federal Deposit Insurance Corporation to insure all deposits. 60 years later, the European Union followed with a Deposit Insurance Scheme in 1994. With the exception of the US Savings & Loan debacle, deposit protection and insurance schemes worked reasonably well for domestic institutions. However, the 2007 Financial Crisis cast serious doubts as to whether these schemes also work for large, globally active banks. Lehman Brothers syphoned billions of deposits from Germany before it collapsed in 2008. When it failed, losses in the range of EUR 4bn almost bankrupted the private German deposit insurance. Also, the German HypoReal Estate needed around EUR 100bn of government support since its “Schuldscheindarlehen” counted as deposits. Re-thinking deposit protection and insurance is thus mandatory, given the global dimension of today’s large banks.

Modern Capital Markets

The 19th century saw a rapid expansion of international credit extension, underpinned by the fast integration of the world economy, which made major progress with the Transcontinental Railway in the USA and the opening of the Suez Canal in 1871. The demand for infrastructure financing in the developing world was matched by much improved fund raising capacity of “new” types of banks such as Merchant Banks,

Investment Banks and Credit Mobilier Banks. They were the key agents of the globalization of finance in the second half of the 19th century. Whilst their specific business model differed, all raised bonds and issued shares on behalf of other companies. To minimize their risks, they formed large underwriting syndicates, as we know them today. Syndication was by and large the equivalent to re-insurance, which was “invented” by Sal Oppenheim in Koln at around the same time. Without any doubt, the syndication of underwriting risk minimized the risk for the participating banks. It allowed them to diversify their risks and to underwrite larger transaction than they could do on their own balance sheet. On the other hand, listing large numbers of shares and bonds on exchanges introduced a new risk to financial stability: the psychology of bullish and bearish investors. The period from 1870 to the First World War saw an increase in stock market panics with extreme drops of liquidity. Domestic stocks dominated the exchanges at that time (rail, shipping, infrastructure, later hydro electric power). But international stocks were often amongst the most volatile. For a while, the financial muscles of large institutions could stabilize the markets. JP Morgan’s intervention in the 1907 panic is legendary. However, even the resources of large banks became too small and in 1913, the United States had to establish the Federal Reserve Bank system as “Lender of Last Resort”, a concept now widely adopted throughout the world. In a nutshell, the development of modern capital markets reduced the syndication risk for banks but also increased the instability of financial markets and eventually required the creation of modern central banks.

Steps to Global Banks

The last decade of the 19th century also witnessed the beginning of a development, which became important one hundred years later. To support their national industrial champions, big banks began to expand abroad by setting up foreign branches and subsidiaries. A good

example is Deutsche Bank's expansion into Asia and Latin America where subsidiaries were set up in the 1890s. These subsidiaries conducted wholesale banking operations (Trade Finance, Lending) in support of German business interests. They did not engage in domestic or retail banking. As such, they helped to insulate their multinational clients from financial volatility abroad and provided a controlled mechanism for direct investments into developing markets. Whilst severely curtailed during the two world wars and with some international operations even confiscated by the allies, this business model survived and proved useful until the early 1970.

With the process revolution in retail banking in the 1980s, things began to change. Many banks started to acquire foreign retail networks. We have seen Spanish banks expanding into Latin America, French, Italian and Scandinavian banks into Eastern Europe, English and American banks into developing markets. Whilst many of these foreign assets were purchased when they were distressed and the buyers were welcome at the time, but the Financial Crisis revealed tension in this business model. The losses in the early stages of the Financial Crisis affected the P&L of Italian, French and Scandinavian banks noticeably and led to a curtailment of lending in Eastern Europe. Also, without the dollar liquidity from their Latin American operations, the Spanish banks would be in worse shape. No real accident has happened yet but the tensions inside global retail banks need to be addressed. Cross-border activities, even when done within a global banking group, are not without risk as the next section elaborates.

Cross Border Lending

There was a further development towards the 20th century, which deserves our attention: the increase in cross-border lending. Banks in nations with a high savings ratio face a particular problem. They have a structural liability overhang, in other words more deposits than loans.

With insufficient domestic credit demand, such excess liabilities can be used either to building up cross-border lending operations or making portfolio investments. There are several examples in history for both.

A good example is the Swiss-German cross-border lending at the eve of the First World War. Assuming that both Gold Standard and fixed exchange rates were a permanent feature, Swiss Cantonal and Savings Banks built large mortgage portfolios across the border in southern Germany. Typically, they lent in Reichsmark whilst the deposits were in Swiss Francs. The First World War shattered their assumptions. At the outbreak of the war, the convertibility of the Reichsmark was suspended. Within five years, the massive inflation reduced the value of Germany's currency to almost nothing, resulting in staggering losses for the Swiss lenders. Had the Swiss for reasons which are beyond the scope of this paper, not reduced their lending before the war, the losses may well have exceeded their absorption capacity. Managing their asset and liability mismatch, the Swiss imported unknowingly systemic country and currency risk into their financial sector.

Another good example of the dangers of cross-border operations can be found in the time between the two world wars. After the Dawes plan settled the questions of German reparations in 1924, American and British banks began lending short-term dollars and pound sterling again to Germany and Eastern Europe. However, with the crash of 1929, the American banks called these loans back triggering a de-levering, which eventually resulted in 1931 in the failure of Creditanstalt-Bankverein in Austria and Danat Bank in Germany. From 1930 to 1931, the supply of international short-term credit dropped by a staggering 36%. The shockwaves from the collapse of these two institutions heavily damaged the European banking system and also reached across the Atlantic. Whilst the banking crisis in the United States had mostly domestic causes, the foreign dimension contributed to the loss of confidence. To summarize, events in the inter-war period showed that

systemic risk in cross-border operations can arise from both maturity transformation and un-hedged currency exposure.¹ Since financial institutions on both sides of the Atlantic were involved, the systemic risk travelled both ways.

The challenges to the international financial system and the solvency of states were eventually addressed with the creation of the IMF in Bretton Woods in 1944. But a good thirty years later, the system was under stress again. The sharp increase in oil prices after the Yom Kippur war in 1973 created the Petro and Eurodollar market. Banks were swamped with cheap dollar deposits from oil producers, which they used for extensive cross-border lending primarily to Latin America and Africa. Both US and European banks were involved. Borrowers were primarily governments. It took not too long until the bubble burst. Once the Federal Reserve Bank started to sharply increase fed fund rates in 1979 to combat inflation, troubles started. Already in 1982, Mexico declared that it was unable to service its debt. But Mexico was not alone. Other nations followed. In a few years, Latin America quadrupled its foreign currency debt to around 50% of GDP. The losses for the US and European banking system were so severe that the intervention of the IMF and the US government was required. A permanent solution was eventually found in 1989 with the exchange of defaulted loans for new Brady bonds. Investors accepted discounts of up to 50% in exchange for collateralized new debt. Whilst the losses for the banking system could thus be stretched over several years, the debt crisis was a serious blow to Latin America's economic development. Between 1980 and 1985, per capita GDP dropped by almost 9%. It took Latin America almost 30 years to recover.

The debt crisis in Asia in 1997 followed similar patterns albeit portfolio investors and capital markets were the key drivers this time. Also, due

¹ In 2010, there was almost an identical replay of this scenario. When the US money market funds reduced their USD lending by about one third, French, Belgian and Italian banks had to significantly reduce their balance sheet

to the strength of their export sector, the Asian countries recovered faster. Whilst the IMF framework was a useful start, it also showed its limitation. Asian countries started to hoard foreign exchange reserves in order to never again becoming dependent from the IMF. Whilst their motivation is understandable, it created a new imbalance. The large holdings of US Treasuries by Asian countries contributed to lower USD interest rates. It was thus one of the factors that made the high consumer leverage in the USA possible. Clearly, the IMF framework needs to be strengthened and modernized. It must address structural financial imbalances. Global asset and liability mismatches and large maturity transformation create global bubbles and systemic risk. Recognizing and managing them in a globally coordinated fashion is vital for Financial Stability².

Systemic Risk from Portfolio Investments

Earlier, this paper mentioned that excess liquidity might also result in the building of large investment portfolios. This was indeed one of the transfer mechanisms for the Financial Crisis in 2007. For different reasons, banks such as UBS, ING, Dexia, ABN AMRO (later acquired by RBS), the German Landesbanks or IKB all created large, un-hedged investment portfolios with a significant share of securities related to the performance of the American mortgage market (RMBS, CMBS, REITs). There are still no reliable figures available, but it is fair to estimate that the European banking sector bore about 20% of the total US mortgage losses of USD 2.3tr. The collapse of the US real estate bubble thus directly translated into the Eurozone and forced government to bail out their insolvent banks with support packages in three digit billion numbers. At the time of the build-up of these portfolios, they were seen as safe and profitable alternatives to risky lending. They also attracted

² The European sovereign debt crisis also puts its fingers on the limitations of the IMF when dealing with weaknesses in a currency union.

less capital. It turned out that they were the channels through which the systemic risk reached Europe!

Central Liquidity Management

Without spending time on the systemic risk of financial innovation³, there is one management innovation of significant importance. The rapid progress in technology and communication makes today group wide liquidity management possible. For most banks, who operate only in one country, this is not relevant. But there are a couple of global banks, which could trigger serious disturbances if they transferred liquidity unconstrained from one country to another. The example of Lehman Brothers Germany has already been mentioned. The transfer of prime brokerage cash from London to New York on the eve of Lehman's collapse was another. It is a well-known fact that the deposit base in Germany is larger than in Italy. Thus, Italian banks with subsidiaries in Germany are always tempted to transfer excess liquidity to their home country. In effect, within a group, cross-border lending takes place. Whilst global management of liquidity increases the efficiency of the financial system, for times of crisis some safeguards are necessary to keep the liquidity where it belongs.

Conclusion

Many innovations in finance started with the idea of risk reduction or risk diversification. However, as this paper illustrates, there are often unintended consequences, which are overlooked and create new systemic risks at a later stage. The risks of what we now call globalization, has been with us for the longest time. The ever changing interconnection amongst institutions around the world poses risks which are difficult to perceive and even more difficult to manage. The

³ Derivatives were rather beneficial during the Financial Crisis. Without derivatives, the volatility in foreign exchange, interest rates, equities and commodities would have overwhelmed several institutions

individuals who head our public and private sector institutions responsible for the management of such risks are often the victims of their own limited vision and aspirations. An experience I can confirm from the many weeks I spent in Brussels without finding people willing to listen. The contribution of globalization to systemic risk is probably neutral with benefits and new risks keeping a close balance. What we need to learn from history is that every innovation has unintended consequences and thus new, unknown downside risk we need to explore before it is too late and that no regulatory framework survives intact without permanent adjustments to new market realities.

London, 8 June 2012