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The Collapse of the Cypriot Banking System: A Bird's Eye View

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Abstract

The depositor bail-in of March 2013 was an unprecedented event that shocked Cyprus and reverberated around the world. Up until 2000, Cyprus ran a closed and tightly controlled financial system and its banks were conservative, inward-looking institutions. The turn of the century brought the liberalization of the financial system, EU entry and adoption of the euro. These watershed events drastically altered the environment. Banks, supervisors and the political system did not handle this transition well, setting the stage for a major crisis. Government inability to act decisively when problems first appeared gave the crisis catastrophic proportions.

Keywords: Cyprus crisis, property bubble, bail-in.

1. Introduction

The events of March 2013 made Cyprus a household name around the world. The haircut of deposits in the country's two largest banks was unprecedented in conception and scale and dealt a huge blow to the Cypriot economy. Much has been written about the controversial decisions taken at the two Eurogroup meetings and the events leading up to them.[1] Mistakes have been identified and blame has been generously assigned. Many of the details remain murky and we no doubt stand to learn more as new information comes to light over time.

Catastrophic outcomes like the one Cyprus experienced do not occur out of the blue. Market distortions and inefficiencies create imbalances that build up over many years until they reach explosive levels. Such events are also not the result of a single mistake; it takes many errors and omissions,

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The thrust of the argument developed in this paper is presented in a more concise form in Clerides (forthcoming). Many of the main elements were also presented in a public lecture titled 'Cyprus in crisis: a chronicle and a new course', delivered on several occasions between November 2013 and April 2014 as part of the University of Cyprus' Free University Lecture Series.

[1] See Apostolides (2013), Clerides (2013), Michaelides (2014), Orphanides (2014) and Zenios (2014).

and the actions and inaction of multiple players to create such a spectacular collapse.

The purpose of this paper is to trace the economic developments in Cyprus that culminated in the big crash. We will not discuss the events of March 2013 as there is not much we can add to the above mentioned studies. Those events will be worth revisiting once more information becomes available, as is likely to happen. We will instead focus our attention on the historical development of the banking sector and credit allocation in Cyprus. The emphasis will be on assessing the role of the banking system as the primary channel for the allocation of capital to productive investments. This function in particularly crucial in small countries without developed capital markets. We will seek to identify institutional features, structural problems, misguided policies, and cultural factors that contributed to the banking sector's collapse. The objective is not to engage in a blame game but to learn from the mistakes of the past, so that we can avoid repeating them in the future.

We will argue that many of the problems of the banking system had their roots in the protected environment of the past. Cyprus was ahead of its peers in having a deep financial system that supplied the economy with ample credit. The system was stable and there were no major crises in the commercial banking sector (the co-operative sector did experience a major crisis in the early 1980s). But the allocation of credit was not optimal. Lending was based on collateral value and personal guarantees, thus credit flowed to sectors where collateral was available. As a result, Cyprus likely over-invested in collateralizable physical structures and under-invested in machinery and equipment, which are important drivers of economic growth. Interest rate regulation fostered the development of an over-banked financial system. Local institutions grew into inefficient banking behemoths with an abundance of staff and extensive branch networks but with little expertise in project appraisal and risk management.

The liberalization of the financial system and subsequent EU accession changed the landscape dramatically. Banks became more outwardly oriented and started setting up operations in Greece and other countries. EU entry enhanced Cyprus' attractiveness as a business center, leading to a sharp increase in international business activity and a rapid expansion of the banking sector. Cyprus ran huge current account deficits financed by capital inflows from non-EU countries. Continuing on the already existing trend, this capital did not go into productive investments but rather to consumption and to investment in real estate and construction. A huge property bubble developed, especially in the period 2006-2008.

The global economic crisis caused the bubble to burst. The Greek malaise that surfaced a year later was the equivalent of being hit by a tsunami after an earthquake. The exposure of Cypriot banks to the Greek economy created a grave situation. The restructuring of Greek debt in October 2011 marked the beginning of the countdown to March 2013, although at the time no-one could have predicted the precise nature of that climax. A major adjustment was inevitable, but the blow was magnified significantly by the government's failure to understand the severity of the crisis and to form the appropriate response. This lack of resolve exacerbated the banks' problems and eventually led to their collapse.

The rest of the paper aims to explain how capital inflows, banking hubris, over-consumption, complacent supervision, and political obstinacy combined to make the fascinating story of the rise and fall of the Cypriot banking system. Section 2 discusses the performance of the financial system during the protected period, starting from the late 1970s and up until the year 2000. Section 3 describes the system's evolution after financial liberalization and chronicles the buildup of excesses and imbalances. Section 4 attempts an assessment of the errors and omissions – both systemic and individual – that shaped the final outcome. Section 5 concludes.

2. The financial system before liberalization

The financial system of Cyprus was closed and tightly controlled until the year 2000.[2] Interest rates were capped by a ceiling set by a 1944 law and strict capital controls were in place. The Central Bank of Cyprus (CBC) implemented policy using tools such as credit growth restrictions and minimum reserve requirements. A consistent policy of exchange rate stability was also followed and contributed to a stable financial system.

2.1. Interest rate ceilings

For 50 years (1944-1994), the lending rate ceiling was fixed at 9%. The Central Bank lowered the ceiling to 8.5% in September 1994 and to 8% in March 1997. It remained at that level until interest rates were liberalized on January 1, 2001. Maximum rates on deposits were also set by the Central Bank.[3]

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[2] Phylaktis (1995) provides a comprehensive history of Cyprus banking from its 19th century origins to the 1990s.

[3] Historical data on interest rates and other financial variables are available on the CBC website, http://www.centralbank.gov.cy/nqcontent.cfm?a_id=11572.

Interest rate ceilings – also known as usury ceilings – have been common in past decades as a way of preventing exploitation of the poor. They were gradually abandoned in many countries during the wave of financial liberalization of the 1980s and 1990s.

Economic theory suggests that the impact of a price ceiling depends on the level at which it is set. If set below equilibrium price, a ceiling will lead to a reduction in output. If the ceiling is set above the equilibrium price, standard economic theory suggests that it will be non-binding and the market will simply clear at the equilibrium price. But other outcomes have also been shown to be possible in this latter case. Ceilings above equilibrium price might serve as focal points for rate-setting determination. Early evidence in support of this hypothesis was provided by Sheahan (1961). More recently, Knittel and Stango (2003) found similar evidence in their study of nonbinding ceilings on credit card interest rates imposed by US states.

In Cyprus the interest rate ceiling was the de facto rate on all loans. This could be because the ceiling was binding or because it served as a focal point. Distinguishing between the two is not easy. At 9%, the ceiling was not particularly high; in fact it compares favorably with lending rates in other countries from the mid-1970s to the mid-1990s.[4] It is therefore likely to have been binding, especially for some high-risk loans such as credit cards. In an unregulated market there are typically different interest rates, reflecting the riskiness of the loan. The fact that there were no lower rates on offer, even for the most secure loans such as housing loans, suggests that the ceiling might indeed have served as a focal point. In other words, the ceiling might have been binding for high-risk loans but also a focal point for low-risk loans.

2.2. Credit availability, savings and investment

If the interest rate ceiling was binding, it would lead to restricted access to credit and a shallow financial system. Table 1 shows domestic credit by financial institutions as a percentage of GDP in Cyprus as compared to countries in the five income groups as classified by the World Bank. Cyprus compares very favorably with all groups during the 1980s and 1990s, when the interest rate ceiling was in place. Its financial depth was at about the same level as high-income countries and much higher than countries in other groups. There is certainly no evidence here that the interest rate ceiling restricted credit in Cyprus.

[4] Source: World Development Indicators, World Bank.

TABLE 1

Evolution of key variables over time

	1975 -1979	1980 -1984	1985 -1989	1990 -1994	1995 -1999	2000 -2004	2005 -2009	2010 -2013
Domestic credit to private sector by banks (% of GDP)								
Cyprus	70	60	73	112	141	164	213	296
High income: OECD	48	57	64	69	73	91	120	126
High income: non-OECD	31	38	45	50	53	56	66	76
Upper middle income	28	31	36	37	36	36	44	49
Lower middle income	19	21	20	19	20	21	27	33
Low income	12	12	11	10	11	12	14	20
Gross fixed capital formation (% of GDP)								
Cyprus	27.7	30.8	25.4	23.6	18.6	17.7	21.1	18.4
High income: OECD	24.7	23.1	22.6	22.0	22.5	22.1	22.5	19.7
High income: non-OECD	23.3	29.6	25.9	25.9	30.3	24.5	26.4	23.5
Upper middle income	26.4	25.8	23.0	22.3	23.4	20.7	23.7	24.4
Lower middle income	21.8	24.7	22.6	22.1	21.5	21.7	24.4	25.5
Low income	15.1	16.6	16.4	16.2	15.6	16.2	18.9	22.5
Gross domestic savings (% of GDP)								
Cyprus	13.2	19.4	22.0	20.7	19.0	17.7	15.2	12.0
High income: OECD	23.0	22.0	24.0	23.3	24.1	24.6	25.3	24.0
High income: non-OECD	27.5	27.5	26.6	24.6	24.6	31.7	36.4	37.2
Upper middle income	21.2	19.6	21.1	17.8	18.5	18.3	21.0	21.0
Lower middle income	13.3	9.0	9.7	12.0	11.8	10.1	10.8	12.5
Low income	7.8	3.3	6.6	5.0	5.1	4.2	1.1	2.7
Foreign direct investment, net inflows (% of GDP)								
Cyprus	5.3	3.3	1.7	1.5	4.6	8.7	8.2	4.2
High income: OECD	0.6	0.6	1.0	1.3	2.9	4.2	6.1	4.2
High income: non-OECD	2.0	2.5	2.6	3.3	8.2	6.0	8.4	7.3
Upper middle income	1.8	0.8	1.1	0.8	2.2	3.3	3.6	6.6
Lower middle income	1.0	1.0	1.2	2.3	3.3	2.7	5.5	5.2
Low income	1.3	1.9	1.2	2.2	4.2	4.4	6.9	4.7

Source: World Development Indicators, World Bank. Reported figures are means over each five-year period and over countries in each income group.

Investment rates can provide some additional evidence. The second panel of Table 1 shows gross fixed capital formation in Cyprus compared to the average level in the various income groups. Cyprus had investment levels similar to high income and upper middle income countries until the early

1990s. A drop is observed around the mid-1990s and investment levels remain at relatively low levels since. Since credit did not decrease during this period – rather it increased significantly – this might indicate that credit in the late 1990s and 2000s was increasingly being channeled into consumption rather than investment. We will provide some evidence in support of this conjecture later on. It is not clear, however, that the tendency toward increased consumption can be attributed to the interest rate ceiling.

Why did the interest rate ceiling not restrict the amount of credit? There are a number of possible explanations. One is that banks simply did not have alternative ways of earning a return on their funds. Cyprus had high savings rates in the 1980s and 1990s (see the third panel of Table 1). This provided banks with a good source of deposits. In a closed financial system, the only options were government bonds and credit to the private sector.

A second explanation is that deposit rates were also subject to ceilings. This meant that banks could count on a fixed interest margin (the difference between the lending rate and the deposit rate) that guaranteed a certain level of profitability. This stability was conducive to the provision of credit.

Moreover, the interest margin was not the only source of profit. It is widely believed that banks used various fees – such as 'study fees' for considering a loan application – to circumvent the ceiling and enhance their profitability. Clerides (1993) reports mean profit ratios (profit before tax as percent of total assets) in the 1980s for banks in OECD countries and compares them to the two major Cypriot banks, Bank of Cyprus and Laiki. The Cypriot banks – especially Laiki – had higher profitability than banks in most OECD countries.[5] This lends support to the hypothesis that non-interest income from loans was substantial and contributed to bank profitability.

2.3. Credit allocation

It seems clear that the ceiling on lending rates did not have a significant impact on the availability of credit. But price ceilings may also have dynamic effects that impact the *allocation* of credit. Theory suggests that regulation of a competitive industry is likely to lead to more product uniformity as the price constraint deters firms from creating high quality

[5] Phylaktis (1995) reaches the same conclusion using several measures over a different time period.

products (White 1972) and – more importantly – to increased competition in quality levels (Douglas and Miller 1974). This can be demonstrated in a simple supply-demand framework with prices set above equilibrium level. Over time, nonprice competition will shift demand rightward (indicating higher quality) and supply leftward (indicating higher costs). This outcome often reflects overprovision of quality relative to the social optimum. Airlines are an instructive example: in the era of regulation airlines competed in scheduling and in-flight service. This is widely thought to have been inefficient, as indicated by low capacity levels. Following deregulation, prices dropped, the range of quality levels offered increased with the advent of low-cost airlines, and capacity utilization increased significantly.

A similar overprovision of quality is likely to have occurred in the Cypriot banking sector. With prices fixed, competition found expression in quality of service. Banks built extensive branch networks, leading to an over-banked, costly and inefficient system.[6] Foreign banks that were unable or unwilling to operate in this environment left the country in the 1980s, their operations being absorbed into the two big Cypriot banks. Even after the recent post-crisis consolidation, Cyprus remains heavily over-banked.

The price uniformity that is associated with ceilings in competitive markets has an important implication that is particular to banking. As mentioned earlier, an unregulated banking market will feature interest rate differentiation on the basis of risk. When rates are uniform, lenders will engage in *credit rationing*, choosing to finance only the safest projects. Such projects tend to be related to real estate and construction, which provide ample collateral. Riskier projects that can potentially offer greater returns cannot be financed. Even if it does not lead to a reduction in the quantity of credit, an interest rate ceiling will likely lead to a misallocation of credit.

The degree to which the interest rate ceiling affected credit allocation in Cyprus is an open question that has never (to our knowledge) been rigorously analyzed. If banks were able to differentiate study fees on the basis of the borrower's risk profile, they would have been able to price risk appropriately. It is not known whether this was the case, but it seems unlikely. Clerides (1993) argues that the combination of an interest rate ceiling and study fees provided banks with an incentive to give out small, short-term loans that could be backed by ample collateral. The regulatory framework therefore favored low-risk loans to real estate and construction and to businesses that had real estate to use as collateral. Clerides argues

[6] See Argyridou-Dimitriou and Kanaris (2012), Chart 7.2. Evidence of the relative inefficiency of Cypriot banks is found in studies such as Athanassopoulos, Soteriou, and Zenios (2000) and Savva (2007).

that this could be the reason why the fraction of total investment going to machinery and equipment in the 1980s was almost half in Cyprus than in OECD countries (roughly 20% versus 35-40%).[7]

Figure 1 shows the evolution of bank credit and its sectoral allocation in 1980-2007. From about the mid-1980s there is a shift of credit away from the productive sectors of the economy and toward personal loans. Towards the end of the period we see a big increase in loans to the building and construction sector.

Table 2 presents a breakdown of gross fixed capital formation (investment) in Cyprus in comparison to the EU average for the period 1997-2012. Cyprus has always invested more heavily than other countries in dwellings and other buildings and structures. The fraction of investment going to these two categories hovered around 66% in Cyprus with the exception of the boom period 2005-2008 when it reached 72%. In the EU28 this fraction ranged between 54-58%. Investment in machinery and equipment is roughly on par with other European countries but Cyprus invests less in transport equipment and intangible fixed assets.[8]

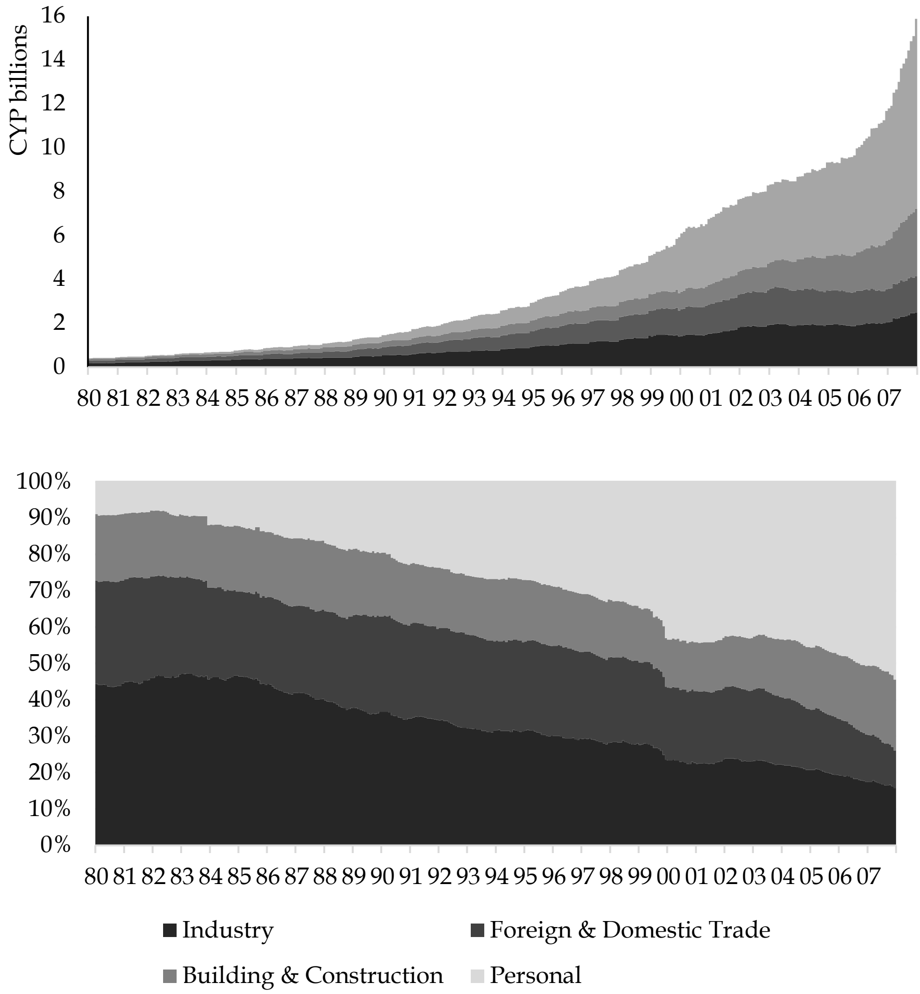
The examination of credit allocation data suggests that Cyprus has historically over-invested in physical structures and under-invested in machinery and equipment. But perhaps the most striking development is in the growth of personal credit (which includes housing). Personal loans grew from about 10% of total advances in the early 1980s to 54.5% at the end of 2007. The most recent Central Bank data (August 2014) put this figure at 41.5%, but the difference may reflect a different categorization rather than an actual shrinking of the category.[9] Personal consumption (non-housing) loans is one of the worst performing categories. In August 2014 the fraction of non-performing loans stood at 41.0% for owner-occupied housing, 49.7% for other property, and 60.1% for consumer loans.

[7] The role of machinery and equipment investment as an important driver of economic growth has been well understood since the work of De Long and Summers (1991).

[8] Eurostat defines intangible fixed assets as ‘fixed assets that consist of mineral exploration, computer software, entertainment, literary or artistic originals and other intangible fixed assets intended to be used for more than one year.’

[9] Data available at http://www.centralbank.gov.cy/nqcontent.cfm?a_id=13891.

FIGURE 1
Sectoral distribution of credit, 1980-2007



Source: Central Bank of Cyprus. The 'industry' category includes agriculture, mining, manufacturing, transportation & communication, tourism and public institutions and corporations.

TABLE 2

Gross fixed capital formation by asset type

	EU28				Cyprus			
	1997 -2000	2001 -2004	2005 -2008	2009 -2012	1997 -2000	2001 -2004	2005 -2008	2009 -2012
Dwellings	27.0	27.3	28.8	27.1	33.4	34.4	41.4	30.6
Other buildings and structures	27.4	28.6	29.7	30.6	32.1	31.7	30.6	35.7
Transport equipment	9.1	9.4	9.4	8.6	5.9	7.4	4.9	2.9
Other machinery and equipment	28.8	26.0	24.2	24.7	27.6	25.2	21.6	27.3
Cultivated assets	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.1
Intangible fixed assets	7.4	8.3	7.6	8.6	0.7	1.0	1.4	2.3

Source: Eurostat.

2.4. Relationship banking

The Cypriot banking system has historically been heavily based on relationship lending. Relationship lending emerged as a way to mitigate the asymmetric information problem between lenders and borrowers. By developing a long-term relationship with their borrowers, banks acquire information that they can use to better evaluate their creditworthiness and monitor their behavior. Relationship lending requires extensive branch networks and close links to communities. Domestic Cypriot banks invested heavily in building relationships.

The literature has pointed out some potential problem that might arise as a result of relationship lending.[10] One issue is what is known as the soft-budget constraint problem. Once banks develop a relationship with a borrower, they become reluctant to enforce the terms of a credit contract if payments are not forthcoming.[11] The flexibility of bank debt provides incentives for renegotiation. Banks might continuously roll over loans, paying off old loans with new, bigger ones. There is plenty of anecdotal evidence that this was common practice at Cypriot banks.

Relationship lending also gives rise to a hold-up problem. The acquisition of information by the bank over time alleviates the information problem but at the same time it gives the bank a monopoly over that information. This can be used by the bank in order to impose non-competitive terms to

[10] See Boot (2000) for a discussion of these issues.
[11] This is similar to the regulatory capture problem (Stigler 1961).

a borrower facing a high cost of switching to another bank. It is hard to determine the extent to which this might have been a problem in Cyprus.

An alternative way to address the information problem is through the requirement of personal guarantees (also referred to as co-signers). Such guarantees do not typically involve the pledging of specific assets. This would make them less valuable than collateral, but banks have the flexibility of going after any asset, which might be an important advantage. Cypriot banks relied heavily on them and – although there is no hard evidence – it has been claimed that banks were more successful recovering from guarantors rather than from pledged collateral because the legal process for foreclosures is complex and time-consuming. If that is the case, then the use of personal guarantees might have helped increase credit availability and reduce bank exposure. The microfinance literature has also shown that joint liability lending may be an effective way to increase loan repayment.[12] Guarantees may not be so effective in the case of a systemic crisis when everyone is in financial difficulty and there is a complex web of personal guarantees needing to be disentangled.

2.5. Summary

Cyprus had a tightly controlled and highly profitable banking system up until the year 2000. The system was stable and provided plentiful credit but likely allocated too much of it to the financing of physical structures that could serve as collateral and too little to investments in machinery and equipment that might generate greater positive spillovers. Personal loans took an ever-increasing share of the credit pie.

Operating in a controlled environment with essentially fixed interest rates, banks invested heavily in strong customer relationships. They built extensive branch networks, giving Cyprus one of the highest ratios of bank branches per capital in the world. Banks had no incentive to acquire expertise in risk assessment and project appraisal, leaving them vulnerable in the looming age of open markets.

3. Financial liberalization and the bubbly 2000s

The financial sector of Cyprus was liberalized as part of the harmonization process with the EU acquis communautaire.[13] Interest rates were fully liberalized on January 1st, 2001. Restrictions on borrowing by domestic

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[12] The literature is vast; Ghatak and Guinanne (1999) is a good starting point.

[13] See Argyridou-Dimitriou, Karamanou and Cleanthous-Petoussi (2012) for an overview of the transition.

residents in foreign currency were eased at the same time. The transition was very smooth. Concerns had been voiced that removal of interest rate controls would lead to much higher interest rates and a decline in credit and investment (Demetriades 1999). These fears did not materialize. Interest rates in fact declined after liberalization and credit continued to grow at a healthy pace. The financial system adjusted well and there was no disruption to the flow of credit.

The next milestone came in 2004. On May 1st of that year, Cyprus joined the European Union and foreign exchange controls were completely abolished. The referendum on the Annan plan had been held the week prior to that, bringing to an end a period of tension and uncertainty. Cyprus was entering a new era.

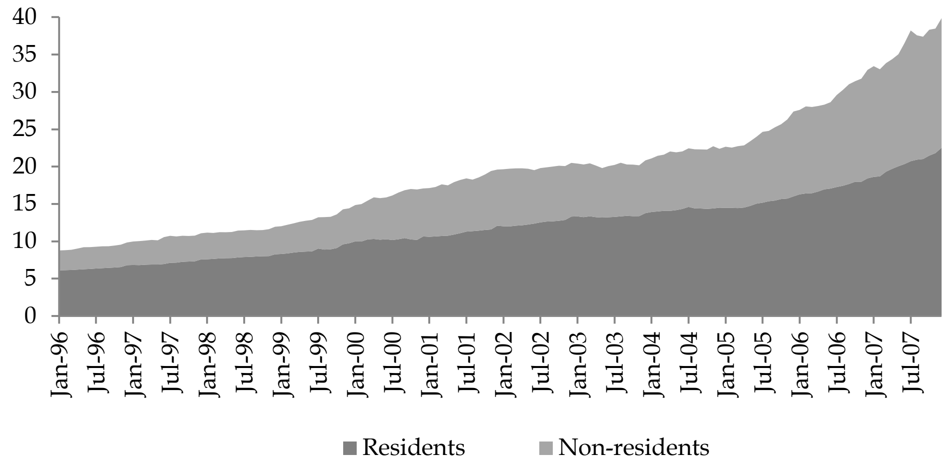
3.1. The credit and property boom

Up until then, the rate of growth of deposits in Cyprus had been relatively stable. Things changed in mid-2005, when deposits in the Cyprus banking sector started growing at very high rates. The increase seem to come from residents and non-residents alike (see Figure 2). It was followed by a similar increase in the rate of growth of credit, particularly in the real estate and housing sector. Until the end of 2005, credit to this sector had been growing at about 6-7% annually. In early 2006 the rate of increase started accelerating and peaked in the first quarter of 2008, when real estate and housing loans were growing at an astonishing annual rate of 43.9%.[14] Argyridou-Dimitriou, Karamanou and Cleanthous-Petoussi (2012) suggest that this was 'mainly driven by strong economic activity in the construction and real estate sectors, as well as the excess bank liquidity created by the suspension of the obligation of banks to maintain 70% of their total euro-denominated deposits, which were no longer classified as foreign currency, in liquid assets.' On the last point, Michaelides (2014) notes that to counterbalance this effect the CBC had raised the requirement for euro deposits from 0% to 25%. It is not clear that this had an impact as credit continued to expand at extremely high rates for some time.

[14] Argyridou-Dimitriou, Karamanou and Cleanthous-Petoussi (2012), Chart 6.8 and related discussion on p. 244. The authors also point out the significant increase in lending in foreign currency, which became possible after the abolition of capital controls and seemed attractive because of the much lower interest associated with other currencies such as the Swiss franc.

FIGURE 2

Deposits in Cypriot banks, 1996-2007 (€bil)



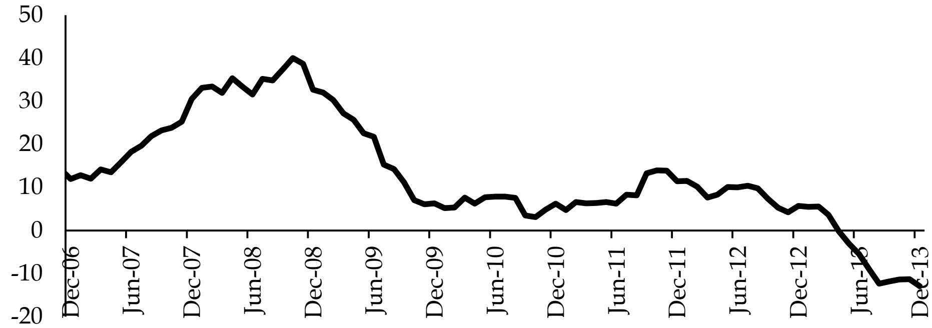
Source: Central Bank of Cyprus.

Figure 3 plots the annual growth rate of total loans by Cypriot banks between end-2006 and end-2013. The pattern discussed above can also be observed here, with credit growth reaching almost 40% in October 2008. The rate of growth declined sharply in the next few months and by end-2009 it was down to 7-8%. Somewhat surprisingly, credit growth returned to higher levels in 2011, exceeding 10% for the year. It started declining in the second half of 2012 but remained at relatively high levels of 5-6% right up to the March 2013 bail-in. Much of that credit continued to flow to the construction sector, even though the signs of excess capacity from the boom of the previous years were clear and the country was facing heightened uncertainty. For example, in 2010 the Bank of Cyprus announced with much fanfare a €200 million loan to one of Cyprus' biggest developers. The project is now in arrears, as is the majority of other big development projects.

The extent to which credit in Cyprus diverged from norms in other countries can be observed in the first panel of Table 1. The mean level of credit to GDP in the period 2010-2013 was 296% in Cyprus. Only two other countries exceeded 200%; Denmark at 208% and Honk Kong at 2012%. Private debt held by households and businesses in Cyprus had reached uncharted territory.

FIGURE 3

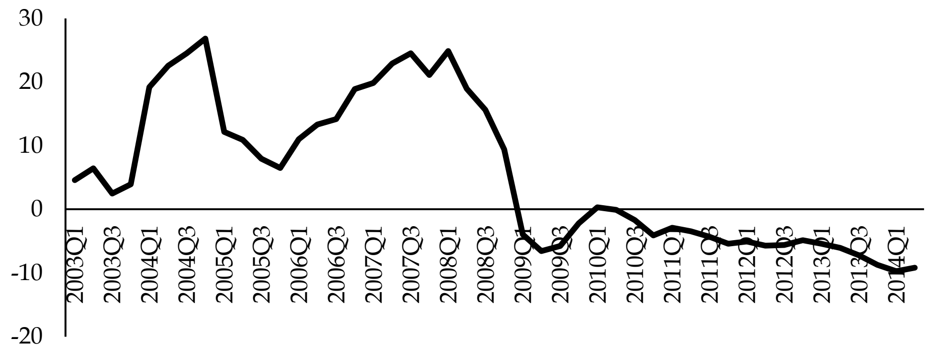
Annual growth rate of bank credit



Source: Central Bank of Cyprus.

FIGURE 4

Residential propery price index, annual growth rates



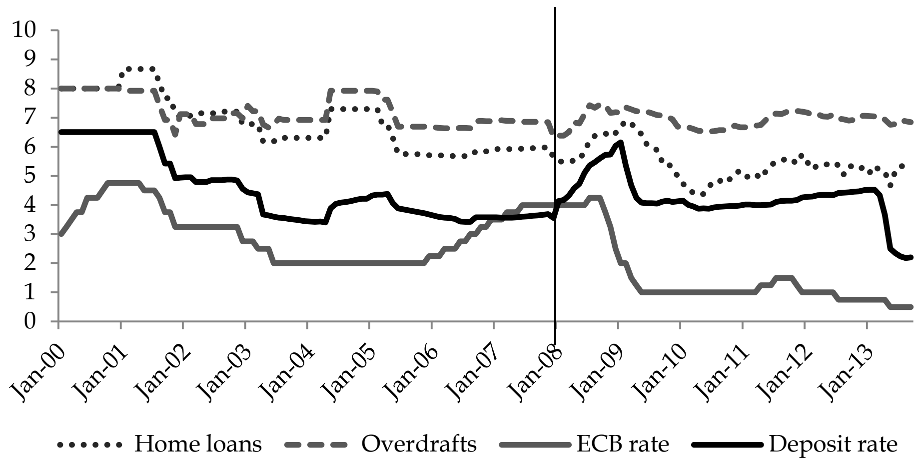
Source: Central Bank of Cyprus

The large volumes of credit flowing to the real estate and construction sector inevitably led to a boom in property prices. Figure 4 plots growth rates in the Central Bank's residential property price index (RPPI). It should be noted that the value of the index prior to 2006 is based on limited data and for this reason the Central Bank only publishes the index from 2006 onwards. We include the earlier period here along with the appropriate caveat because of its significance. Residential property prices rose very quickly in 2004 but the rate of increase subsided in 2005. This was followed by a three year period (2006-2008) of very high rates of growth, at times approaching 25% annually. Prices multiplied by 2.4 times between 2002 and the 2008 peak. They rose by a total of 57% just in the 2006-2008 period.

3.2. Interest rates

Figure 5 plots the time series of the interest rate on business overdrafts and on home mortgages and the deposit rate on 12-month deposits, along with the ECB's base rate. As mentioned in section 2, interest rates were dictated by the Central Bank until January 1st, 2001. After liberalization, interest rates followed a negative trajectory, with deposit rates dropping by more, leading to a higher interest margin. Interest rates rose sharply with Cyprus' adoption of the euro. This is likely due to competition for deposits, which had intensified after Greek banks entered the Cypriot market in an effort to get a piece of the deposit pie. The net interest margin was very slim during this period.

FIGURE 5
Key interest rates



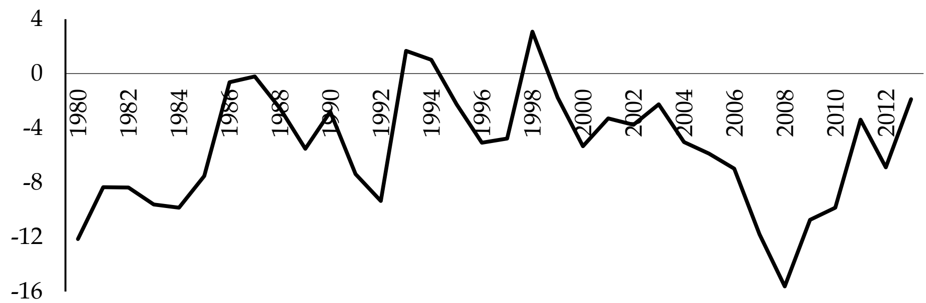
Source: Central Bank of Cyprus, European Central Bank. Deposit rate is for a 12-month deposit.

Rates started falling by the end of 2008 with the onset of the global financial crisis. Business rates ended up at the same level as they were before the euro, while mortgage rates were lower. After the bail-in, deposit rates were dramatically reduced while lending rates remained at high levels, leading to a high interest margin. Overall, both lending and deposit rates have been substantially higher than other Eurozone countries. Unlike the sovereign, Cypriot businesses and households never really reaped one of the biggest potential benefits of the euro: low interest rates.

3.3. Competitiveness

The erosion of the competitiveness of the Cypriot economy during the 2000s has been well documented, particularly in IMF country reports;[15] Kyriacou and Ktoris (2012) also present and discuss several indicators. Here we will confine the discussion to two key indicators. The first is the current account balance, displayed in Figure 6. Starting in 2004, the external balance of Cyprus deteriorated significantly, culminating in a deficit of almost 16% in 2008. For four consecutive years, 2007-2010, the deficit was at or exceeded 10% (the 2010 figure was -9.83%). This is an extraordinarily high levels of deficits that should have caused many alarm bells to go off well before the crisis hit.

FIGURE 6
Current account balance



Source: IMF World Economic Outlook Database 2014.

A second key indicator is the rate of growth of wages. The International Labor Organization's (2013) Global Wage Report reports data on the growth in real wages and labor productivity in developed economies in two distinct periods, 1999–2007 and 2008–2011. Cyprus is an outlier in both periods, with wages rising substantially higher than productivity. It is striking that the trend in rising wages continued well into the crisis period.[16]

It could be said that Cyprus in the 2000s suffered from a version of the Dutch disease.[17] Excessive activity and economic rents in the banking, construction and real estate sectors drove up wages and the prices of goods, services and assets. This led to a deterioration of the country's competitive position and made it difficult for other sectors to compete

[15] Available at http://www.imf.org/external/country/cyp/index.htm.

[16] International Labor Organization (2013), p. 14, Figure 11.

[17] Égert and Kierzenkowski (2014) find evidence of real-estate induced Dutch disease in France. Their analysis suggests that France's manufacturing decline can be at least partially attributed to resource reallocation from the exporting to the construction sector triggered by fast rising property prices.

internationally. Tourism is a prime example. While the rest of the economy was booming, a deteriorating tourist infrastructure meant that Cyprus was offering declining quality at an increasing price. Unable to compete with newly emerging destinations, it was forced to rely on cheap, imported labor, which further exacerbated quality problems. The country found itself unable to compete with emerging destinations offering good quality at much lower prices.

3.4. Public finances

Cyprus has historically sustained fiscal deficits. In the aftermath of the 2002-03 major tax reform, the fiscal deficit climbed to 6.5% in 2003 and public debt rose to nearly 70% of GDP (Figures 7 and 8). In order to meet the criteria for euro accession, the government adopted a policy of fiscal discipline. This paid off and by 2008 the government was running a surplus of 3.5% and debt had dropped to 48.9% of GDP. On the surface, things in 2008 were looking very good from a fiscal perspective.

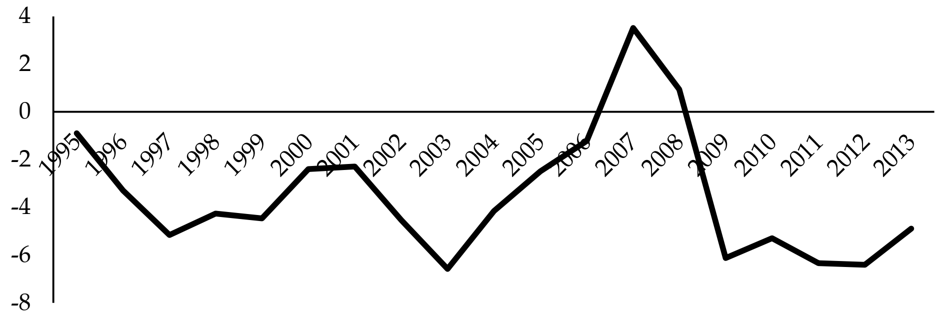
But this picture was largely a mirage created by windfall revenues from a tax amnesty, the real estate bubble, and overconsumption. As an example, the capital gains tax (which mostly comes from real estate transactions) generated €467 million in 2007, compared to €99 in 2005 and €75 in 2009.[18] The International Monetary Fund's (2014, p. 57) country report for Cyprus highlights the issue and provides more complete data. A simple plot of the housing price index and total government revenue on the same graph shows that the two are highly correlated. Total real estate related revenue in 2011 and 2012 was barely a third of what it was in 2007. These patterns are broadly consistent with those reported in Reinhart and Rogoff (2009). Using evidence from previous crises, they show that government revenue growth typically peaks two years before the crisis. Once the crisis hits, revenues decline for two years and start rising again in the third year.[19]

[18] Source: Ministry of Finance.

[19] Whelan (2014) tells a similar story for Ireland: a seemingly sound fiscal position was quickly reversed when the property bubble collapsed.

FIGURE 7

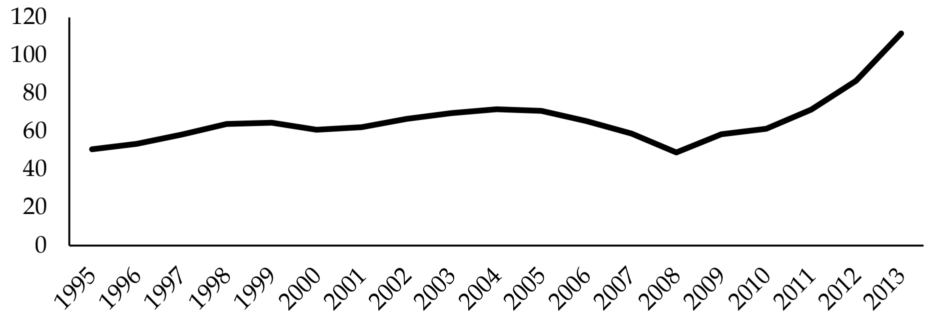
Fiscal balance



Source: IMF World Economic Outlook Database 2014.

FIGURE 8

Public debt (percent of GDP)



Source: IMF World Economic Outlook Database 2014.

FIGURE 9

Government expenditure (percent of GDP)

Source: Eurostat.

Economists had warned about the transient nature of revenues. The new government elected in 2008 did not heed the warnings and substantially increased spending, even as the global crisis was getting under way. Coupled with the sudden drop in revenues, this resulted in big deficits, even though Cyprus faced only a mild recession in the early phase of the crisis. The cumulative deficits of the period 2009-2013 amounted to €5.0 billion in additional public debt (in nominal terms and not counting interest), about 30% of 2013 GDP. Figure 9 shows the rising levels of government activity in the economy. In 1995, government expenditure was 30.9% of GDP. The share rose gradually to over 40% in 2003 and then declined somewhat, only to rise sharply in 2009. In 2013 it stood at 41.4%, still significantly lower than the EU average of 48.5% but high for a country that does not provide universal health care and with a substantial private presence in primary and secondary education.

3.5. Summary

Huge capital inflows in the period 2004-2008 created an environment with abundant liquidity that led to excessive lending and risk-taking. There was a bubble in real estate and construction, reckless expansion of banks overseas and a general climate of overconsumption by households, businesses, and the sovereign. Investment in real estate crowded out investment in the rest of the economy, with negative consequences for productivity. The onset of the global crisis burst the bubble and led to large public deficits and problems in the banks' loan books. Failure to appreciate the situation and take immediate corrective action exacerbated the problems and led to a catastrophic outcome.

4. An assessment

Was the crisis unavoidable? What errors and omissions contributed to this catastrophic outcome? One thing to keep in mind is that Cyprus is not the only country to have suffered though the consequences of a property boom-and-bust during this period. A list of countries with similar recent experiences would include the United States, Iceland, Ireland, Spain, and several others. Reinhart and Rogoff's (1999) magnus opus documents that financial and sovereign crises are surprisingly common throughout history and the buildup of asset bubbles is a signature feature of many of them. The question of whether Central Banks should be tasked with containing asset price bubbles (assuming they are able to identify them) is a subject of debate and probably will be for some time to come. Here we will focus on the specifics of the development of the crisis in Cyprus and on how decisions taken and not taken contributed to its magnitude.

A general point that needs to be made is that this was very much a systemic failure. The Independent Commission on the Future of the Cyprus Banking Sector (ICFCBS) argues this point convincingly. It identifies as one of the main causes of the crisis 'a failure at the national policy level to appreciate that running a big banking industry involves risk as well as reward'. The Commission goes on to say that

> 'The public attitude was that the banks were doing a good job of supporting economic growth and that the international business they brought added to the nation's wealth. Insufficient attention was paid to the fact that the banks were acting imprudently and that the international business was resulting in serious domestic imbalances, or to how any potential shocks might be handled.'[20]

4.1. The perils of capital inflows

The ICFCBS provides an apt description of the political environment that fostered the banking and property bubble. The prevailing attitude was that capital inflows were unequivocally a good thing and they should be encouraged. This led to misguided government policies, an instructive example of which is a 2007 scheme aimed at attracting investors. The scheme offered permanent residency to several categories of investors, including anyone who would either purchase property or deposit €10 million in a Cypriot bank for at least five years. Although the contribution of this scheme to the influx of deposits is unlikely to have been significant, the fact that it was conceived is indicative of the prevailing mentality. At a time when banks were flush with liquidity, the property market was overheated and the CBC was taking action to contain credit growth, the political system was devising schemes to attract even more capital into the banking system.

Many countries have schemes granting citizenship or permanent residency to foreigners investing in property. Unless they are linked with other investment, these schemes primarily benefit property developers. If a country wants to sell residency permits or passports, it should do so in a way that spreads the benefits as widely as possible. In a country like Cyprus, the multiplier effect of property development is small as a lot of

[20] Independent Commission on the Future of the Cyprus Banking Sector (2013), executive summary point A.7.

the labor and materials used are imported. The Cypriot scheme also distorted the market as it gave priority to people who purchased a home above €300,000. This created an effective price floor and contributed to real estate price inflation, again benefiting developers and property owners. The scheme was recently extended to cover people who invest in Cypriot debt. Unless the debt is bought at much better terms (for the sovereign) than the market offers, it is difficult to see how this scheme benefits Cyprus.

The banks themselves contributed to the massive capital inflows by offering very high deposits rates in an effort to attract foreign capital. This competition became particularly intense after Greek banks entered the Cypriot market in the mid- to late-2000s (Figure 5). Deposit rates reached 5-6%, several percentage points higher than those offered in other Eurozone countries. In order to profit from those deposits the banks would have to earn returns of 7-8%. This is very difficult at any time, and especially at a time when the world was entering a crisis and interest rates were tumbling. The need for high returns is likely to have driven many of the risky – and ultimately ruinous – decisions taken by the banks.

The belief in ever-rising property prices led to a frenzy of bank-financed investment in the sector, as documented in the previous sections. In addition to building up a property bubble, over-investment in real estate and construction crowded out productive investments in other sectors that would expand the country's productive capacity and improve productivity. Cyprus neglected agriculture and manufacturing and invested little in research and technology, areas that are known to produce many positive spillovers and create high quality jobs.

It is striking that property developers managed to stay out of the limelight even as it was becoming clear that excessive credit to the construction sector lay at the heart of the banking sector's problems. Somehow, all criticism was directed at the banks for giving out too many loans and none was aimed at the property developers who were receiving the loans. It was not until after the extremely high level of non-performing loans held by developers was exposed that the follies of the sector began to attract the attention they deserved. As of August 2014, a staggering 72.4% of loans to the construction sector were non-performing.

In addition to the property bubble, the banks used the plentiful liquidity provided by massive capital inflows to finance their expansion overseas. The first step was Greece – a natural choice for many reasons – where they created extensive branch networks and invested in government bonds. Ex-ante, the expansion abroad could have been part of a well-designed diversification strategy. Ex-post, it turned into a disaster as exposure to the

Greek economy brought the banks to their knees. Almost all forays into foreign markets ended in failure and have been or are now in the process of being unwound. BoC's expansion into Russia through the purchase of Uniastrum Bank after the crisis had broken out has been singled out as a particularly questionable decision. The CBC has also been criticized for allowing the transaction to go through.

The Central Bank could also be criticized for being complacent and responding too late to the mounting evidence of a credit and property bubble. Up until 2007, there was no indication that the CBC was concerned about growing imbalances. In the summer of 2007, newly appointed governor Athanasios Orphanides announced an increase in the requirement for own contribution for second home mortgages from 30% to 40%. This was met with intense public criticism, which is indicative of the warped perception of reality that was dominant at the time. The CBC relaxed the constraint less than a year later as the first signs of the global crisis were appearing. In hindsight the move might have been premature, though it is unlikely that keeping the tighter constraint would have made much of a difference.

Warning bells about the size of the banking sector had begun to ring soon after the onset of the global crisis and the collapse of the Icelandic and Irish banking sectors (Stephanou 2011a). A common argument used to counter such concerns was that other countries also had oversize banking sectors; in particular, Luxembourg had a banking sector that was over 20 times its GDP. Stephanou (2011b) points out that this argument fails to acknowledge that Luxembourg's banks were mostly foreign-owned and the Luxembourg sovereign would not be liable in case of problems. He further points out that Cyprus had two major systemic banks, each of which was equivalent (in relation to GD) to the entire banking systems of other countries.

Conventional wisdom in Cyprus is that international organizations like the IMF were complicit because they failed to give early warnings. This belief has been based on selective reading of IMF reports, with quotes such as 'the Cypriot banking system has weathered the crisis better than many other euro zone area countries' and 'the regulatory framework is conservative'.[21] The reality is that the IMF had given repeated warnings about economic imbalances, the erosion of competitiveness, fiscal risks, and vulnerability to a worsening external environment. For example, International Monetary Fund (2009) states that 'the overheating of the economy during 2007–08 has given rise to vulnerabilities'; 'double-digit

[21] International Monetary Fund (2010) and International Monetary Fund (2011) respectively.

and growing current account deficits indicate overheating and competitiveness problems'; and 'the banking sector poses risks by virtue of its size and concentration'. We had been warned.

4.2. Banking practices, ownership and governance

In the space of a few years, the Cypriot banking sector went from being a closed and conservative system to being aggressive and outward-oriented; a transformation that culminated in a disastrous blow-up. The ICFCBS report provides a lucid and highly convincing diagnosis of the problems that afflicted the sector. One point worth highlighting regards banks' lending practices. The business model essentially amounted to a policy of 'you have a title, you get a loan'. Loans were given out on the basis of collateral and personal guarantees, with little regard for the borrower's or the project's ability to generate income that would secure the timely repayment of the loan. When payments were not forthcoming, loans were frequently rolled over. At a time of ever-increasing property prices, a new, bigger loan could be justified because of the increased value of the collateral. This created a vicious cycle of ever-increasing indebtedness.

The practice of hiding non-performing loans under the carpet were facilitated by a rule that allowed banks not to classify loans as non-performing as long as they were sufficiently collateralized. This convention – inexplicably endorsed by the Central Bank – rendered the notion of a non-performing loan meaningless. As long as collateral values would continue to rise, essentially no well-collateralized loan would ever be classified as non-performing under this rule. In reality, banks rarely used foreclosures as a collection tool because the legal process took years. It is thought that they were more successful collecting from guarantors, but no hard data are available.

These practices were a carry-over from the times of fixed interest rates. When rates were fixed, banks had little incentive to properly evaluate projects and assess risk. With liberalization, they would be able to charge differential rates and would therefore need to put in place better procedures for risk management. Demetriades (1999) expressed concerned about the ability of the co-ops to handle this transition. They were considered to be lacking expertise while the commercial banks were better suited to handle the transition. It turned out that the latter were not ready for it either.

This is perhaps best illustrated in the Bank of Cyprus' decision to invest heavily in Greek government bonds (GGBs) at the end of 2009 and beginning of 2010. The Greek crisis had broken out in October 2009 and uncertainty about Greek government finances had sparked a decline in the value of Greek government bonds. On December 10, 2009, BoC's second-in-command Yiannis Kypri made a public statement that the bank had reduced its exposure to GGBs to negligible amounts and it would therefore be unaffected by developments in Greece.[22] Within days of this statement BoC started buying large amounts of GGBs, ending up with about €2.5 billion worth of them by the summer of 2010. The decision to invest in GGBs and to keep them until the debt restructuring was instrumental in the bank's downfall. BoC's strategy has been singled out by Acharya and Steffen (forthcoming) as an example of carry trade with Eurozone bonds. Zenios (2013b) reaches the same conclusion in a detailed account of BoC's actions relating to GGBs.

The Central Bank and its then Governor Orphanides have been criticized for allowing banks to accumulate Greek government bonds and/or not forcing banks to sell them. The first part of the criticism appears unwarranted as banks are not obliged to obtain permission for purchasing bonds and therefore the CBC could not stop them. There may be more merit to the second part of the criticism. Once the CBC realized the extent of BoC's and MPB's exposure to GGBs in early 2010, it could have asked them to discreetly and gradually reduce their exposure. The banks would have had to recognize some losses but this would have been preferable to holding large amounts of a risky asset. Why did the CBC not act? Governor Orphanides was a vocal critic of the haircut of GGBs and likely believed that it would never happen. The turn of events proved this to be a costly miscalculation.

Some key milestones in the ownership and governance of the two big banks also had a role in the way things played out. The departure of HSBC from Laiki in 2006 was perhaps the first such milestone. HSBC left after its efforts to increase its stake in the bank and exercise greater control over its operations were rebuffed by Laiki's board. Laiki proceeded instead with a triple merger with Greek banks Marfin and Egnatia. The merger led to a change in the bank's top management, with Greek financier Andreas Vgenopoulos becoming the key figure in the new Marfin Popular Bank (MPB). Operations in Greek were united under the name Marfin Egnatia Bank (MEB), which operated as a subsidiary of MPB. The backroom dealings behind this merger remain murky. What seems clear is that the bank's former chairman, veteran banker Kikis Lazarides, was out-maneuvered by Vgenopoulos and was ousted as a result.

[22] http://www.stockwatch.com.cy/nqcontent.cfm?a_name=news_view&ann_id=110243&lang=gr.

The decision of the Central Bank of Cyprus to approve the merger has received much scrutiny. Cypriot law at the time prohibited a non-Cypriot entity from acquiring more than a 10% share in any Cypriot bank without special permission from the Central Bank. HSBC's 21.6% share was bought primarily by Vgenopoulos' Marfin Investment Group (9.98%) and by Tosca Fund (8.16%).[23] As each buyer had less than 10%, there was no need for special permission. The Central Bank had received information that the two buyers were acting in coordination, which would have been illegal. The Central Bank eventually ruled that there was no foul play and approved the transaction. The Investigative Commission for the Economic Crisis found no evidence that that an investigation of this issue by the Central Bank actually took place.

It later emerged that then CBC governor Christodoulos Christodoulou and his family were engaged in business dealings with a close associate of Vgenopoulos.[24] A payment of €1 million to a company owned by Christodoulou's family was justified as payment for services to be rendered over the next 10 years. Despite the implausibility of this claim, charges of corruption were eventually dropped. Christodoulou did plead guilty of tax evasion on the earnings from the deal and was handed a five-month jail sentence in October 2014.

The second act of the Laiki saga took place in 2009 when the group decided to merge the operations of MPB and MEB and move its headquarters to Greece. Vgenopoulos cited displeasure with the CBC's supervision and preferential treatment of other banks (by which he clearly meant BoC) as reasons for the move. The political establishment was terrified at the prospect of 'losing' a major bank. Vgenopoulos was invited to Parliament to air out his grievances, while CBC Governor Orphanides came under pressure to be more accommodating to MPB. Although the CBC seems to have maintained its firm stance, MPB did reverse its decision in September 2009 and kept its headquarters in Cyprus.

The merger was not implemented immediately for legal reasons. It was completed a year and a half later, on March 31st 2011. When MPB's problems became apparent, the CBC – and Governor Orphanides in particular – were criticized for allowing the merger to go through. It is ironic that Orphanides, who had been criticized for not accommodating MPB in 2009, was being criticized for allowing the merger in 2011. Orphanides' successor Panicos Demetriades assigned Alvarez & Marsal to

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[23] In his deposition to the government-appointed Investigative Commission for the Economic Crisis, Lazarides stated that Laiki never rejected an HSBC request to seize control of the bank. He also denied any personal involvement in the sale of HSBC's stake to Marfin and Tosca (Pikis, Kramvis, Nicolaou, 2013).

[24] Vgenopoulos denies the association.

investigate the decision. The report largely exonerates Orphanides by concluding that although the CBC could in principle have stopped the merger, this would have been politically difficult. Critics of Orphanides argued that had MEB remained a subsidiary, MPB would not be responsible for capitalizing it. The Alvarez & Marsal report concedes the legal point but argues that in practice parent companies are expected to support their troubled subsidiaries. Indeed this was the case with Crédit Agricole and Emporiki Bank. The question whether the merger could/should have been prevented is therefore open to interpretation and remains a topic of debate.

It is safe to say that the Laiki-Marfin-Egnatia merger proved catastrophic. The combined bank was heavily exposed to the Greek economy in terms of both its loan portfolio and its holdings of Greek government bonds. Reports of preferential loan deals and shady financial arrangements by Marfin Group are being investigated by the Attorney General's office but are vehemently rejected by Vgenopoulos. Regardless of the outcome, it seems unlikely that Laiki would have suffered this fate had it not been for this merger.

The Bank of Cyprus had its own boardroom drama two years after Laiki. An attempt to bring in widely respected former Finance Minister Michael Sarris as Chairman of the Board was defeated and the position was assumed by Theodoros Aristodemou. Aristodemou is one of the largest developers in Cyprus and one of the BoC's largest debtors. In order to minimize conflict of interest he sold his stake to his company, Aristo Developers, prior to taking the helm of the bank. He bought his share back when his departure shortly before departing from his position. This outcome was reported at the time as a defeat for the 'modernizing' bloc and a victory for BoC's traditional powerbase, which included many of its largest customers.[25]

The CBC did not object to the BoC's biggest debtor becoming Chairman of its Board at a time when the real estate bubble was in full swing. Such a decision would be unthinkable under current standards of corporate governance. This event may have seemed of minor significance at the time, except perhaps as a case study in corporate power struggles. But it may have been a pivotal point for the bank's future as an opportunity was missed for a new leadership that could have been taken the bank in a different direction, possibly avoiding costly mistakes such as continued lending to the construction sector well into the crisis and the fateful purchase of Greek government bonds.

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[25] See http://www.stockwatch.com.cy/nqcontent.cfm?a_name=news_view&ann_id=85518 for a report on the vote.

4.3. The Central Bank

One of the biggest casualties of the crisis was the Central Bank of Cyprus. Its reputation has been severely damaged because of errors and omissions – actual or perceived – that either contributed to the crisis or failed to contain it. Its operation has been hampered by continuous conflict with the political system and by internal strife.

We have already mentioned several instances where a different course of action by the Central Bank could have had a significant impact on the turn of events: the ownership change at Laiki and its merger with MEB; the renewal of the BoC's board; BoC's purchase of Uniastrum; the treatment of banks' holdings of GGBs. We also touched on some problematic policies spanning longer time periods, such as the treatment of non-performing loans and the late and inadequate response to the rapid credit expansion.

But the most controversial issue is undoubtedly the CBC's treatment of Laiki. Intense public criticism has been directed at Governor Demetriades for allowing Laiki to stay alive by providing Emergency Liquidity Assistance (ELA) while the bank was insolvent. There is little doubt that Laiki was insolvent by the end of 2012. If that is the case, then the continued provision of ELA by the CBC was in violation of the ECB rule that an institution receiving ELA must be solvent. In defense of his actions, Demetriades argues that letting Laiki go bust would cause panic and threaten the entire banking system. This could have been avoided with a swift conclusion of a program with the Troika that would recapitalize Laiki. The argument is not without merit and highlights the very difficult position the CBC was put in by the government's delay in agreeing on a program. Nonetheless, the questionable legality of the actions has put CBC are increased scrutiny, while the ECB has also been criticized for acquiescing to the ELA provision in defiance of its own rules.

The question of *when* Laiki became insolvent is not easy to answer. We do not have a complete picture of how things evolved and the assessment of solvency is not an exact science. In response to a request for an opinion on the government's plan for recapitalizing Laiki, the ECB stated on July 2, 2012, that 'the objectives pursued by the support measures may be better achieved through bank resolution tools'.[26] This suggests that the ECB already thought that Laiki might be insolvent at the end of June 2012, putting into question the government's decision to inject €1.8 billion into

[26] See http://www.ecb.europa.eu/ecb/legal/pdf/en_con_2012_50_f_sign.pdf.

Laiki at that time. The issue is still open and will continue to be debated. Whatever the outcome, the damage to the CBC's image will be hard to undo.

Prior to the crisis the CBC had a good reputation of being effective and relatively free from political interference. The crisis has revealed this to have been a misconception, as severe governance problems have been exposed. The ICFCBS report points out several shortcomings and makes specific recommendations for improving the governance, independence, and effectiveness of the CBC.

One of the most harmful legacies of the crisis is continuous political interference at the Central Bank. The openly acrimonious relationship between Governor Orphanides and President Christofias started the process of politicization of the bank. Relations between the CBC and the executive improved after President Christofias appointed Panicos Demetriades as the new governor. But the acrimony merely shifted to different players, as now the opposition was accusing Demetriades of exaggerating the banks' problems in order to support the government's claim that the banks were to blame for the country's predicament. The election of President Anastasiades led to further escalation of the conflict between the executive and the CBC. A year after Anastasiades' election Demetriades agreed to resign and was replaced by former Auditor General Chrystalla Yiorkadji in March 2014. There was hope that the respected Yiorkadji would help restore both the CBC's internal climate and its external credibility. Unfortunately problems have continued and just a few months into her term Yiorkadji is facing intense criticism and calls for her resignation over a conflict of interest and questions relating to her contract. The CBC is a sick organization and there is no quick cure in sight.

4.4. The government's handling of the crisis

The government's inability to grasp the magnitude of the problems Cyprus was facing and to take proper measures was instrumental in catapulting a major problem into the catastrophe category. The government of Demetris Christofias started increasing spending upon taking office in early 2008. Coming off a 3.5% surplus in 2007 and with the global crisis not having reached Cypriot shores yet, the government was able to record a surplus of close to 1% of GDP in 2008. Continued spending increases and the arrival of the crisis turned the surplus into a 6.1% deficit in 2009. Calls by local economists, the Central Bank and international organizations like the IMF to control spending went unheeded.

In late 2009 the Greek crisis broke out, raising concerns to higher levels as the two economies are closely connected. As the Greek economy sunk into a deep recession, concerns about Cypriot banking operations there grew. Revelations about the stock of Greek government bonds held by Cypriot banks raised fresh alarms as the possibility of a Greek debt restructuring was becoming increasingly likely. The first haircut of privately held Greek debt was agreed in July 2011. On October 26th the final restructuring was decided. The haircut amounted to a combined loss of €4.5 billion for BoC and Laiki, about 25% of Cypriot GDP.

In the meantime, concerns about Cyprus' fiscal position and its ability to deal with a potential banking crisis had led to a series of downgrades by international credit rating agencies. The downgrades started in the summer of 2010 and by May 2011 Cyprus was effectively shut out of international markets. In early October 2011, just before the major Greek haircut, the government secured a €2.5 billion from Russia that was expected to carry it through the end of its term (February 2013). With this loan, the government was able to resist calls for seeking support from the European Union and the IMF.

This proved to be a very costly mistake. The Greek debt haircut had brought Laiki to the brink of insolvency. It began losing deposits, which were replaced by Central Bank liquidity. Its management was removed by the Central Bank and the new management embarked on a campaign to find investors willing to inject capital into the bank. This was unsuccessful and in May 2012 the government was forced to commit €1.8 billion to recapitalize the bank. Since it was unable to borrow, in the end of June 2012 the government was forced to seek support from the European Union. Even then, the government dragged its feet as it was hoping to secure another loan from Russia and avoid the Troika. This did not materialize and a draft Memorandum of Understanding was finally agreed to in the end of November 2012, after Central Bank Governor Demetriades told the government that he could no longer support Laiki.[27]

The reconstruction of history is an exercise fraught with peril. Yet is seems clear that October 2011 was the critical juncture. The haircut of Greek debt dealt a heavy and disproportionate blow to Cypriot banks. Cyprus was on solid grounds to ask for support for its banks. But this would have required agreeing to a Troika program, something that the government at the time was not willing to do.

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[27] Former Central Bank Governor Orphanides (2014) provides a scathing criticism of government's policy.

5. Conclusions

Property boom-and-bust cycles are a fairly frequent occurrence, but the experience of Cyprus stands out for its sheer magnitude. Capital inflows, credit growth, property prices, private sector debt, current account deficits; they all reached levels that are rarely observed. They combine to paint a picture of excess and an economy ripe for a hard landing. Despite all this, the outcome of March 2013 – the other reason the Cyprus experience stands out – could have been avoided if a more appropriate policy response had been adopted.

Much of the debate in Cyprus has focused on whether this was a banking crisis or a sovereign crisis. This is the wrong question. Zenios (2013a) described it as 'the perfect crisis', an apt description highlighting the fact that both the private sector and the sovereign were heavily burdened with debt. The distinction between banks and sovereigns is in any case fuzzy, as the two are closely intertwined. Several European countries faced large crises since 2008. Although each case had its particularities, a common theme was shared by all: large capital inflows provided plentiful credit that fueled property bubbles. When the economic climate soured and capital dried up, property markets collapsed and banks found themselves exposed to huge losses, prompting the need for state support. This course of events was not restricted to Europe; the United States also followed that script. Reinhart and Rogoff (2009) claim that a 'capital flow bonanza' is a common feature of the run-up to banking crises.

Based on the narrative above, one could conclude that this is all the fault of bankers and property developers. This would be too simplistic. Bankers and developers certainly deserve a very large part of the blame. It is also true that in many cases (Iceland, Ireland, Spain, even Cyprus to some extent) sovereigns were in very good fiscal shape prior to the onset of the crisis. This is often used as an additional argument to absolve sovereigns of any responsibility.

This argument overlooks a significant fact, that credit-financed growth and property bubbles are not just good for bankers and developers. They are also good for governments because they generate a lot of tax revenue. When property bubbles collapse, much of the revenue associated with them collapses along with them. The rosy fiscal picture of many countries riding a property bubble can be attributed exactly to the bubble. Wise governments ought to recognize the transient nature of these revenues and act prudently. Instead, most governments increase spending to match revenues. When revenues dry up, they are left with huge deficits – and banks in need of bail-outs.

The liberalization of the Cypriot financial system opened up new opportunities and presented new challenges for the banks and the country. The banks, their supervisors, and the political system failed to handle these challenges properly. There are many lessons to be learned, and we described many in the text. In closing, we will just reiterate the key ones: capital inflows must be carefully monitored; government policy should aim to attract productive investments, not cash; bank credit should be kept in check, especially to the construction sector; the interdependence between banks and the sovereign should be minimized; independent institutions should be respected but also held accountable; and policymakers should be guided by reality, not by ideology.

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My understanding of the way things evolved in Cyprus has greatly benefited from numerous conversations with thoughtful and knowledgeable people over the last few years. They are too many to mention, but I would like to single out my University of Cyprus colleagues Louis Christofides, Alexander Michaelides and Marios Zachariadis. I also thank an anonymous referee for helpful comments and Nadia Nicolaou for research assistance.

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