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A Decade Long Economic Crisis: Cyprus versus Greece*

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Abstract

The paper compares the recent economic crisis in Cyprus with the much larger and still on-going crisis in Greece, traces the causes behind their differences and assesses each country's future economic prospects. Cyprus entered its crisis with less onerous macroeconomic imbalances, yet with less robust financial and real estate sectors. Cyprus delayed signing its MoU with the lenders but subsequently delivered quickly on the program requirements, front-loading the fiscal policy restrictions. Greece reduced its fiscal deficits, yet, after its economy stabilized and began recovering in 2014, it suddenly adopted in 2015 a very naïve and backward-looking confrontational strategy with its lenders, which brought a second recession. Today, at the end of 2016, Cyprus has managed to keep its international comparative advantages and has the luxury to focus on its long-term growth strategy, having lost only 5% of its pre-crisis income. Greece, after having lost over 22% percent of its pre-crisis income, has not yet escaped its crisis, is still burdened by economic stagnation, an unsustainable public debt and unusually high tax rates that constrain growth. The two countries share common risks today: A very weak financial sector with unusually high no-performing loans, and an unusually low ratio of investment to GDP.

Keywords: Cyprus, Greece, crisis-comparison, macroeconomic imbalances, banking-crisis, NPLs.

1. Introduction

As the year 2016 comes to an end, Cyprus is slowly and robustly emerging out of its economic crisis, while Greece continues to remain deep inside it. Today economic output in Cyprus is only 5% below its 2011 pre-crisis GDP level, whereas in Greece output is far below its own 2009 pre-crisis GDP level, showing an astonishing 22% gap. In current prices, Cypriots have

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lost €1,569 in income per capita, but Greeks have lost €5,263.[1] These differences are even bigger when the comparison is made on disposable incomes, as taxes have gone up a lot more in Greece. And on the social front, Cyprus has almost closed its unemployment gap relative to 2012Q2, whereas Greece remains 12 full percentage points above its own 2010Q1 unemployment level.

Today Cyprus has access to the international markets and can borrow freely at reasonable rates, whereas Greece is shut out of the market. In Cyprus, capital controls are a distant memory, whereas in Greece they remain in full force. Year 2016 economic growth is projected at 2.7% in Cyprus, but negative in Greece, just below zero. Sovereign yield spreads are declining in Cyprus but are stuck at high levels in Greece. And economic sentiment is rising fast in Cyprus and in synchronization with the rest of Europe, whereas sentiment in Greece is relatively flat and stuck alone on its own, having decoupled from the rest of Europe for more than a year and a half, since early 2015.

These differences in economic fortunes are striking and raise a number of questions: Are they due to differences in the two countries' initial conditions before their respective crises hit? Are they due to the different policy responses? Or perhaps are they due to both of the previous reasons? Did other factors - related to the different timing of the two crises or the nature of shock that hit each country, contribute to the outcome we observe? Did the lenders treat each country in a different manner, hence contributing to the differences? More importantly, is the present economic situation a prelude to what the future may bring? What is the appropriate policy recipe for each country? We tackle these and many other questions in the present paper.

The rest of the paper is organized as follows: Section 2 describes the origins and the two phases of the Greek crisis, the first which ended in late 2013 - early 2014, and the second which began in January 2015 and is still with us. Section 3 describes the crisis in Cyprus and its particular special banking roots. Then, armed with the knowledge of what actually took place in the two countries, Section 4 compares the experiences in the two countries from the time markets denied them access and, hence, the countries were forced to ask for official help, until today. The analysis flushes out a number of interesting differences as well as similarities and thus digs deeper into true causes of the crises. The comparison enables the reader to form an informed opinion on the correct policy recipe for each country. We provide our own recipe in Section 5, which also concludes.

[1] The drop in Cyprus is from €22,535 in 2011, to €20,966 in 2016, and in Greece from €21,386 in 2009 to €16,123 today. (Source: AMECO data base).

2. The Two Phases of the Greek Crisis

2.1. Macroeconomic imbalances pave the way for the crisis

The Greek economic crisis began when the international financial crisis was tapering off. It dates back to October 2009 when a newly elected government discovered the country's on-going fiscal deficit was three times its earlier forecast, a few months earlier. The eventual – finally revised - deficit number for 2009 turned out to be €36.0bn or 15.2% of GDP. The size of the deficit was 38.9% of the size of total revenues, an unprecedented amount by any previous historical standard. Naturally, it shocked everybody: the European politicians at the Eurogroup, who were supposed to be looking over any aberrations over 3% of GDP, the rating agencies which were previously placing Greece in one of their best credit risk categories, A-, and of course, the markets, which were pricing Greek government bonds quite close to the Bunds. The respective spread in 10-year yields at the end of September 2009 was only 130 basis points (i.e. 1.3%).

Fiscal deficits in Greece were getting larger since 2006, but had escaped the attention of markets, perhaps because the debt-to-GDP ratio had not been affected. Although the nominal size of debt was rising, nominal GDP was rising equally fast, keeping the debt to GDP ratio more or less constant in the neighborhood of 100%.

In late 2009, the fiscal imbalance was not the only macroeconomic problem. The current account was also in deficit, at 12.3% of GDP, showing that the country was not in a position to export goods and services of equal value as the ones it imported, primarily for its domestic consumption. Again, this deficit was consistently present for a number of years, revealing a deeper problem of lack of competitiveness. For some time, the country was consuming beyond its means, that is, beyond its ability to produce. And this over consumption was made possible through borrowing, which markets were willing to amply provide at very low interest rates.

The lack of competitiveness had already showed up in cost competiveness indices and other globally followed indices, like the Word Bank's Doing Business Index. Greece was ranked 96th among 181 countries in the Index, while at the same time the OECD average ranking was at 31 (World Bank (2008)). Yet the warning signals of those indices were consistently being ignored as the country was growing fast, with an average rate of growth of 3%, the second highest in Europe after Ireland. Since 1992, growth was uninterrupted and even accelerated after the country made a serious effort to eventually join EMU in 2001. Thus, in an environment or rising living standards, no one paid serious attention to economic imbalances, which were always being justified. The over-consumption and over borrowing,

for example, were being explained away as a rational response to the expected future upcoming higher national income, which the EMU participation would bring (Blanchard & Giavazzi (2002), Lane (2012)).

2.2. Phase I of the crisis

In late 2009, when the fiscal imbalance became visible, Phase I of the Greek crisis began. The rating agencies began downgrading the country and by April 27, 2010, Standard and Poor's had already cut Greece's credit rating to speculative grade status. Bond yields began rising as well. Soon worried bond investors would refuse lending the Greek government any money at all. A sudden stop of imports for lack of cash was precluded only after the intervention of the remaining EMU countries, which rushed to prevent a Greek default by putting aside the so called "no bail out" principle.

In May 2010, Greece signed a set of bilateral agreements with other EMU countries for an €80bn loan plus another €30bn Stand-By-Arrangement (SBA) with the IMF. The loans were planned to be disbursed over a period of three years, i.e. until the time Greece was expected to be in a position to access international financial markets at reasonable borrowing rates. The loans were accompanied by a Memorandum of Understanding (MoU) – what later became known as the first economic adjustment program for Greece – on specific economic policy conditionalities, which described the actions Greece would have to undertake in order to bring its finances back to balance, reform its economy and ensure its financial system remains stable and healthy (IMF (2010), European Commission (2010)). The loan money would be provided in installments after Greece would show conformity to those actions.

The subsequent fiscal contraction caused a bigger recession than anticipated. Almost 14.1% of real GDP was lost within three years (2009-2011) and the unemployment rate skyrocketed from 8.4% on an annual basis at the end of 2007 to 17.9% at the end of 2011. The size of the fiscal multiplier had been underestimated (Blanchard & Leigh (2013), IEO (2016)), partly due to misjudgment, partly due to a punishing attitude by the Europeans and partly due to a credit crunch since 2009. Greek politicians also proved reluctant to fully carry the reforms they had signed to do. Lenders also pushed labor market reforms prior to product market reforms. This made the recession a lot worse, as product prices did not adjust downward immediately, and the drop in nominal wages was translated into a bigger drop in real incomes and domestic aggregate demand.

By 2011 the large recession, together with the continuing – yet lower – fiscal deficits, were pushing the debt – to – GDP ratio way up to

unsustainable levels. This brought calls for a debt haircut, which eventually took place in February 2012, through the so called Private Sector Involvement. Outstanding government bonds and loans were swapped for new bonds. Essentially, bond holders received cash EFSF bonds (of maturity up to two years) for 15% of the old face value and bonds that matured over a twenty year period from 2023 to 2042 for 31.5% of the old face value (Zettelmeyer et. al. (2013)). In present value terms, old bondholders lost about 78% of their investment (Bank of Greece (2012)). One class of such investors was the domestic Greek banks, which had not been affected by the earlier international crisis, but now their capital base was completely wiped out. They were thus recapitalized mainly with public funds, with money which originated from a new, second, lending arrangement with the same official creditors.

The second economic adjustment program was signed together with the agreement on the PSI in February 2012. At the time, only €73.0bn of the original €110bn from the first economic adjustment program was lent out to Greece.[2] The new second loan extension amounted to another €164.5bn loan (with the EFSF and IMF contribution at €144.7bn and €19.8bn respectively (IMF (2012))), on top of the money that had already been disbursed. And €48.8bn of that amount together with another €1.2bn from the first rescue program, thus a total of €50bn, was earmarked for the needs of the banking system. The new European funds came from the newly created European Financial Stability Fund (EFSF), the predecessor of the current European Stability Mechanism and would cover borrowing needs until the end of 2014. The IMF also extended its earlier SBA for four years, up to March 2016. This second program was based on a forecast of positive growth past 2014 (real GDP target for 2014 at 2.5%) plus the optimistic assumption that the debt-to-GDP ratio would decline to 120% by year 2020. The new conditionalities were a lot more detailed than those of the first program, as lenders decided to micro-manage the necessary reforms (IMF (2012)).

Greek banks went through two recapitalizations, in 2013 and in 2014. In the first, most of the capital came from the borrowed public funds, which resulted in a de facto nationalization of the Greek banks. In 2012 many banks were sold to healthier ones and the banking system was consolidated into essentially four systemic banks (Bank of Greece (2012)). Yet the continuing recession in 2013 and the rising non performing loans by companies and individuals, forced a second bank recapitalization in early 2014. This was accomplished entirely with private funds, as the

[2] Under the first economic adjustment programme for Greece, the Euro-area member states disbursed to Greece €52.9bn and the IMF €20.1bn (European Commission (2012)).

economy had stabilized and the new investors were forecasting a brighter future for the banking sector (HFSF (2015)).

Indeed, as year 2014 was moving along, the economy showed signs of revival. Economic sentiment was rising, new FDI had surpassed its previous pre-crisis peaks, investment in machinery and equipment became positive after years of decline, unemployment began declining and privatizations picked up momentum. Gross domestic product rose in 2014 by 0.6% and was forecasted to rise further to 2.7% in 2015. The government was even able to access the markets twice and issue a 5-year bond in April with a coupon of 4.75% (yield 4.95%) and a 3-year bond in July with a coupon of 3.375% (yield 3.5%).

The budget for 2015, which was submitted to Parliament in November 2014, was balanced, as it forecasted a primary surplus of 3% of GDP, equal to the interest expenses. Furthermore, in the fall of 2014, when the newly formed Single Supervisory Mechanism (SSM) conducted the first European wide asset quality review and stress tests, it found the Greeks banks in its dynamic scenario as adequately capitalized all the way to the end of 2016 (ECB (2014)).

2.3. Phase II of the crisis

At the end of 2014, as the economy was picking momentum, Greece was ready to leave the lenders' bailout program, like Ireland and Portugal had done before. The government had already secured an Enhanced Conditions Credit Line (ECCL) from the Europeans with €11bn unused bank recapitalization funds. Another €13bn of unused IMF money was soon to be added to that pool. The credit line would serve as a safety pool in 2015 and later, in case the country had trouble accessing the markets. And at that moment, debt was perceived as sustainable. The IMF, which in the past had expressed reservations, now had come out strongly, claiming that the public debt was on a sustainable path (IMF(2015)). In addition, further debt relief measures were already under discussion according to the November 2012 agreement (Eurogroup (2012), Strupczewski (2014)).

The optimistic expectations of 2014 were subsequently cut short by a new, inexperienced coalition government of left-wing (the majority) and right wing (the minority) populists, who came to power following the snap elections in late January 2015. They had essentially promised a magic wand would solve all problems. But reality slowly crushed the illusion that there was another – easier - way of reinstating the lost living standards, which earlier politicians had presumably failed to deliver.

The new government caused the economy to stall, thus bringing Phase II of the crisis. It ignored the economy's supply side and the need for continuing reforms and, instead, wrongly focused on a possible nominal debt haircut. It followed a very naïve confrontational strategy with the lenders, attempting to bring the negotiating clock for debt relief back to 2010. It thus deprived the economy of the necessary cash installments and forced the ECB to decline cheap funding to the Greek banks (ECB (2015a)) just one week after the elections. Greece was subsequently exempted from the ECB's Public Sector Purchase Programme (PSPP), the quantitative easing (QE) that started in March 2015 (Claeys et al (2015)). The earlier expected smooth exit from the rescue program, which had been orchestrated with great care back in 2014, was destroyed. State arrears went up to €6.1bn, drying up liquidity of the private sector, while €7.6bn were squeezed out of the state entities' cash buffers.

The erratic and experimental policy of the first half of 2015 created fear and anxiety in the population, who gradually pulled about €45bn from the banks or 25% of their deposits. Economic sentiment fell drastically, splitting away from its earlier European trend, the flow of new investments stopped and the economy froze. Everybody was kept on hold, essentially searching for survival in an environment of uncertainty of what the next day would bring. And capital controls were put in place in late June 2015 to prevent further deposit drainage, thus dealing another blow on the private sector and on exports (Gogos and Stamatiou (2015)).

By mid-year 2015 the economy was in front of imminent collapse, so the penniless Greek government finally woke up to the danger, yet chose to go through a political gimmick of calling a yes or no referendum for July 5th for agreeing with a new rescue program, which would include further austerity measures. The government openly favored the No vote on a presumably lenders' program. [3] A referendum on fiscal matters is unconstitutional in Greece for obvious economic reasons. It nevertheless took place.

The population objected to new austerity and delivered a No vote with 61.31% majority (Yes vote at 38.69%). Yet, despite the overwhelming No vote, which the government itself had openly supported, within three days after the referendum the government switched its policy by 180 degrees. It was dragged to accept even stricter conditions than it had negotiated three weeks earlier, and a specific third rescue program for 2015-2018, for otherwise it faced "Grexit."Under the third economic adjustment programme for Greece, an amount of up to €86bn would be lent to Greece (ESM (2015a)).

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[3] Yet the Government had previously agreed to more than 90% of its content.

New elections were soon called for September of 2015 as the policy switch and the third program created waves of departures within the leftist party of SYRIZA, the major coalition partner. Many of its members objected to the earlier "surrender" and the third rescue package and openly called for Grexit. The September elections brought again the same coalition of left-wing SYRIZA with right-wing ANEL to power. Apparently, the population had not yet absorbed the deeper causes of the new negative Phase II economic shock and what had actually happened during the first eight months of 2015, and thus gave the earlier government the benefit of doubt and a second chance. At the same time, the previous SYRIZA "Grexiteers" did not manage to muster 3% of the popular vote and thus failed to enter the Greek Parliament, which shows that despite the pain, the Greek population continued to perceive participation in EMU as an anchor of long-term economic and political stability.

The reversal of economic fortunes in 2015 has created an annual loss of about €14bn in real GDP relative to earlier forecasts. Now the economy is expected to be at 76% in 2017 of where it was back in 2007, instead of being at 82%, as was expected back in 2014.[4] Moreover, Crisis-Phase II has added to Greek nominal debt approximately another €40bn. To see the latter, observe what happened to only one item, the value of State holdings in Greek banks. The new recession in 2015 took a heavy toll on bank stock prices, which fell to almost zero by the fall, creating a loss of close to €25bn for the State.[5] Banks' capital base also shrank from new losses originating from a new generation of rising non-performing loans. The SSM performed a new AQR and new stress tests on the Greek banks, one year before the scheduled time for all European banks. New capital needs of about €14.4bn were discovered (ECB (2015b), ESM(2015b)). A third recapitalization took place in November 2015, in which two of the four systemic banks failed to find all the necessary funds from the private sector. The other two are now completely in private hands, with the State owning a very small percentage of the outstanding shares.

By the fall of 2016, the economy remains in recession and non-performing loans continue to rise. Non-performing exposures, which include some of the restructured loans and are higher than NPLs, have jumped up by ten

[4] Authors' calculations.

[5] Among other items, the most prominent is the foregone primary surpluses for three years in a row, which add to the nominal debt ca €22bn based on the IMF(2014) and IMF(2016) projections. Ironically, the current Greek government considers this loss as a gain because it was not forced to take restrictive measures! Yet, the surpluses would be naturally generated by a growing economy, without any new fiscal measures, had the new 2015 government continued on the earlier policies.

parentage points relative to 2015 and are now in the vicinity of 50%. And on their liability side, banks are unable to bring back, but very little of the lost deposits. Their dependence on Eurosystem borrowing and on the expensive ELA remains high, although ELA is on a declining path as the stock of loans on the asset side of their balance sheets to be financed is declining.

By the end of October 2016, the government did manage to close the first review of the 3rd rescue program with a one-year delay and now is trying to expedite the second review. Government arrears to the private sector are declining – thanks to tailor made European funding, and some liquidity has come back to the system. Yet economic policy is heavily leaning on new higher taxes, which are bound to trap the country in a low growth trajectory over the long term.

Consensus private forecasts for 2017 by foreigners point to an exit from the recession and a positive growth rate of 1%, while official forecasts are higher, at 2.7%.[6] The IMF's official forecast assumes that substantial debt relief is coming soon (IMF (2016a), (2016b)), and that the country would be able to join ECB's Quantitative Easing program after its debt would be deemed sustainable. The Greek government is hoping and betting on achieving both.

3. A Banking Crisis in Cyprus

The crisis outbreak in Cyprus took place in March 2013, almost three years after the outbreak of the Greek crisis and was different in nature. Although it shared with the Greek crisis similar earlier disequilibria, like fiscal deficits, declining competitiveness, or a real estate bubble, it was nevertheless mainly a banking crisis.[7] The earlier macroeconomic imbalances were not as big as the Greek ones, yet they were sufficient to cause an upheaval, given the on-going European crisis. Prior to March 2013, the key external events that had shaped Cyprus' most recent economic history were the entrance into the European Union in 2004, the membership in the European Monetary Union in 2008, the post 2008 international and subsequent Greek and European crisis, as well as the Mari accident in 2011.[8]

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[6] According to Focus Economics (2016b) the consensus 2017 real GDP forecast was at 1.1% in October 2016, down from 1.5% in January (Focus Economics (2016a)).

[7] Clerides (2014) discusses the nature of the Cypriot crisis and emphasizes that the crisis in Cyprus is not only a banking crisis.

[8] For an overview of the Cypriot crisis and its different aspects, see also Hardouvelis (2016), Michaelides (2016), Orphanides (2016), Xiouros (2016), and Zenios (2016).

The bank bail-in of March 2013 was shocking, yet Cyprus managed to absorb it and subsequently recover slowly. Below we first describe the events that led to the Cypriot crisis of 2013 and then analyze the economic adjustment program and the overall successful response to the crisis from 2013 on.

3.1. Early vulnerabilities up to the international financial crisis

A natural point to begin the discussion is 1999, when EMU was formed. Since then, and until the end of 2007, when the international crisis gained momentum, Cyprus enjoyed uninterrupted economic growth. The average rate of growth was 3.9%, the average unemployment rate at 4.3, the average fiscal balance at -2.7% of GDP – just below the EMU requirement of -3% - and the public debt – to – GDP ratio at 64%, close to the long-term EMU target of 60%. Yet, economic vulnerabilities were building up. Competitiveness was declining, the real estate sector was over-heated and the size of the financial sector was growing bigger, becoming a huge multiple of the country's size (Hardouvelis (2016)).

The gradual deterioration in competitiveness can be seen in a number of indicators. The real effective exchange rate, which measures how expensive are a country's products in terms of labor costs, had deteriorated by 15%since 1999. The current account balance, which measures the ability of the country to export goods and services relative to its corresponding imports, had deteriorated from a small deficit of less than 1% of GDP in 1999 to an overwhelming 11.8% deficit in 2007. The country was obviously living beyond its means and the high growth was being financed mostly by external borrowing.[9] During the same time, the rise in domestic demand caused a simultaneous real estate bubble. By 2007, housing prices had gone up 80% since the year 2000 and continued increasing, peaking in 2009 at 230%. The increase was sharper than in Spain, Greece, Italy or Portugal.

During the pre-crisis years the Cypriot banking system comprised of four distinct types of banks: the domestic commercial banks (Bank of Cyprus, Cyprus Popular Bank, Hellenic Bank), accounting for around 60% of total assets, the subsidiaries of Greek commercial banks, the co-operatives, and the international banking units. The total Cypriot banking sector grew to become one of the largest in the EU-27. Total assets jumped from €61bn in 2005 to €155bn in 2010. The expansion was even more remarkable if

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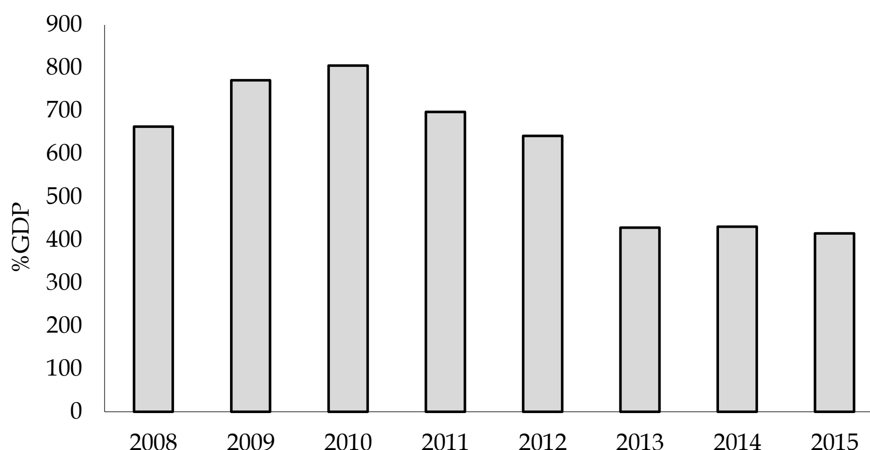
[9] Some of the financing also occurred because of FDI, for example, by the inflow of foreign capital in order to buy real estate. Some of the financing represents foreign deposits in domestic banks, yet this is still borrowing.

viewed as a percentage of GDP. According to ECB data, total banking assets exceeded 800% of GDP in 2010 and remained at 640% of GDP at the end of 2012, twice as much as the Euro Area average (Figure 1). [10]

FIGURE 1

Total Banking Sector Assets
(%GDP)



Source: ECB, National Statistics.

While a large banking sector does not automatically imply instability, it does become a potential vulnerability (IMF (2010)). [11] This is because any mistake in bank management, which results in losses to stockholders beyond their ability to absorb them, can easily spill over to the rest of the economy and would effectively get multiplied when it reaches the pocket of the average Cypriot taxpayer. This is because there are relatively few taxpayers for the huge balance sheets the Cypriot banks manage. In addition, banking activity in Cyprus was not focused exclusively on foreigners. It also facilitated domestic enterprises and households. The size of borrowing by the private sector in Cyprus was overwhelming. At the end of 2007, corporate debt stood at 96.9% of GDP and went up to 139.2% in 2012, while household debt at 101.4% of GDP and went up to 134.8% at the end of 2012. Hence, the financial sector vulnerability easily morphs into an overwhelming financial risk once a negative financial shock occurs, like it did in early 2013.

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[10] We use data from ECB and HBA.
http://www.hba.gr/4Statistika/UplPDFs/eubankingstructures2007en.pdf
http://www.hba.gr/4Statistika/UplPDFs/eubankingstructures2008en.pdf
[11] http://www.imf.org/external/np/ms/2010/070510.htm.

3.2. Additional post-2007 risks

After 2007, an abrupt regime shift occurred both in the rate of economic growth and in economic policy. The international financial crisis and the subsequent euro area crisis had a profound negative impact on Cyprus. While the earlier vulnerabilities continued (i.e., the current account continued the earlier worsening trend, while the banking sector and private leverage kept growing), over the next five years from early 2008 to late 2012, the average growth fell to 0.2% and the annual average unemployment increased to 11.8% in 2012 vs. a multi-year low of 3.7% in 2008. Moreover, fiscal policy became extremely expansionary to a degree that was not justified as a natural countercyclical policy response to the stress caused by the economic crisis (Hardouvelis (2016)). [12]

The new 2008 AKEL government of President Christofias seems to have followed a reckless expansionary fiscal policy, while it did very little to address the earlier vulnerabilities. Figure 2 tracks the primary fiscal balance from 2004 to 2016 as well as the debt-to-GDP ratio. The switch from a primary surplus of 6.0% of GDP in 2007 to a primary deficit of 3.1% in 2009 is quite striking. This deficit continued in the following years, raising the public debt-to-GDP ratio from 44.7% in 2008 to 79.3%in 2012. [13]

A second new risk was the sudden drop in investment activity. From 2007 to 2012, the ratio of investment to GDP dropped from over 20% to just over 10%. This drop cannot be blamed entirely on the real estate sector. It still persists today, and may negatively affect the supply side of the economy for many years into the future.

The financial sector also became more vulnerable. The rapid deterioration in the macro outlook of Greece resulted in increasing NPLs for banks. In December 2011, the domestic banks' direct loan exposure to Greece amounted to €21.8bn or 126% of Cypriot GDP. The ratio of NPLs from their Greek operations worsened to 42% of their loan portfolio. More importantly, Cypriot banks suffered huge losses to their holdings of Greek government bonds. The PSI severely hit the capital base of the two main leading banking institutions, Cyprus Popular Bank (CPB) and Bank of

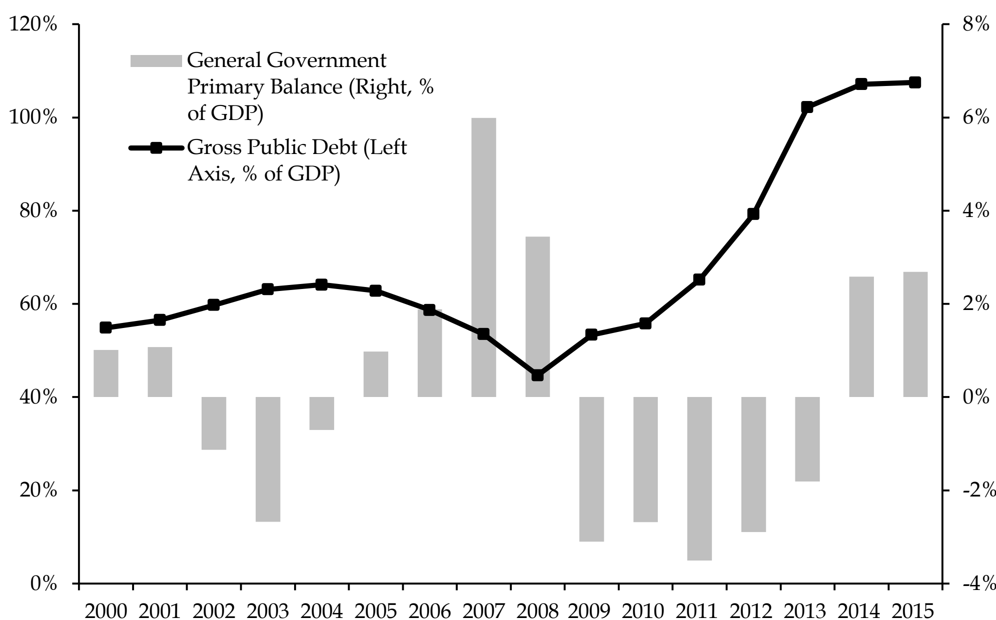
[12] Hardouvelis (2016, pp. 235-236) compares all EU 27 countries and shows that given its cyclically adjusted primary fiscal balance of 2007 of +5.5% of GDP, Cyprus in 2009 ought to have had a cyclically adjusted primary surplus of +1.7% of GDP. Instead, it had a deficit of -3.9% of GDP. Cyprus fell in the ranking by 23 places among the 27 countries, indicating a switch to enormous fiscal laxity from 2007 to 2009.

[13] Including the €1.9bn capital injection to Laiki Bank by the State in June 2012.

Cyprus (BOC). The European Commission estimates that the PSI cost Cypriot banks €4.5bn or 20% of GDP.[14]

FIGURE 2

The fiscal position of Cyprus 2000-2015



Note: ESA2010 terms, not including bank recapitalization costs.
Source: Cystat.

Markets for a long time were comfortable in holding Cypriot Government Bonds (CGBs) with yields that were smaller than even the corresponding Irish ones. Then the discussions on a prospective PSI in Greece slowly pushed yields up in May and June of 2011. And suddenly, the Mari accident in July 2011 – which destroyed over half of the power supply of Cyprus, brought an immediate recession and alerted everybody to the possible risks in Cyprus. Cypriot yields increased further. The rating agencies also began downgrading Cyprus and by January 13, 2012, Standard & Poor's had bought its rating down to below investment grade. The others followed soon, with Fitch being the last to grade Cyprus below investment grade on June 25, 2012.

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[14] EU Commission,European Economy, Occasional Papers 101, Macroeconomic Imbalances-Cyprus, July 2012.

3.3. The 2013-2016 economic adjustment program

Cyprus went through a long process before agreeing to a rescue program. It first applied for rescue in June 2012 but signed up an eventual program in March 2013. In the mean time Cyprus held the Presidency of the European Union and went through Presidential elections. Table 1 presents the chronology of events before and after the rescue program.

A major feature of the rescue program was the bail-in of depositors and the profound restructuring of the domestically supervised part of the banking sector. The program was designed to downsize the domestically supervised sector. Immediate actions took place, including the resolution of CBP (Laiki bank) and the sale of Greek branches of Cypriot banks to Bank of Piraeus. The sector shrank from 750% of GDP[15] in 2012 to 420% in 2015. The current size is lower than in other well established hubs and closer to the EU-average. The bail in of uninsured depositors was deemed necessary in order to ensure debt sustainability. The total cost of the bail in came at 9.4bn Euros, most of which was incurred by non-residents. Subsequently, the conversion of deposits to equity, the additional capital injections initiatives from private investors and the use of program funds for the co-operatives, brought the core Tier I capital ratio from 4.5% in Q4-2012 to 16.5% in Q4-2015.

As part of the conditionality underlying the agreed bailout package, Cypriot authorities also committed to restrict fiscal policy and implement a number of policy initiatives with the view of facilitating the process of internal devaluation and increasing the efficiency of the Cypriot economy. Indeed, Cyprus has performed an impressive adjustment in 2013-2014, outperforming initial targets. A general government primary surplus of 2.6% of GDP in cash terms was already achieved in 2014, two years ahead of schedule vs. a primary deficit of -1.8% in 2013 and -2.9% in 2012. Accordingly, the general government deficit reached a balanced position in 2015.

[15] This number includes also the Greek operations of the Cypriot banks, which may not be reflected in the ECB data.

TABLE 1

Time line of the Crisis in Cyprus

Jan 1st, 2008	Cyprus enters EMU
Feb 17th, 2008	First Round of Presidential Elections in Cyprus
Feb 24th, 2008	Run off round between DISY candidate Kasoulidis and AKEL candidate Christofias. Christofias elected President with 53.36% of the vote
Jan 13th, 2011	Moody's places Cyprus on negative watch for the first time
Jan 17th, 2011	Fitch places Cyprus on negative watch for the first time
Feb 24th, 2011	Moody's downgrade to A2
Mar 30th, 2011	S&P downgrade to A-
May 16th, 2011	Moody's places Cyprus on negative watch again
May 31st, 2011	First Fitch downgrade to A-
July 11th, 2011	Ammunitions explosions in Naval Base Mari. 50% of the power generation capacity is destroyed
July 27th, 2011	Moody's downgrade to Baa1
Oct 27th, 2011	EU leaders summit decision on 50% haircut on Greek public debt
Aug 10th, 2011	Fitch downgrade to BBB
Nov 4th, 2011	Moody's downgrade to Baa3
Dec 16th, 2011	Fitch places Cyprus on negative watch again
Jan 13th, 2012	S&P downgrade to BB+, the first rating agency to rank Cyprus below investment grade
Jan 27th, 2012	Fitch downgrade to BBB-
Mar 13th, 2012	Moody's downgrade to below investment grade (Ba1)
May 3th, 2012	Panicos Dimitriades took office as the new Central Bank governor to replace Orphanides
Jun 13th, 2012	Moody's downgrade to Ba3
Jun 25th, 2012	FITCH downgrade to BB+, below investment grade
Jun 25th, 2012	Cyprus application to ESM
Jul 1st, 2012	Begins Cyprus Presidency of the European Union Council
Jul 25th, 2012	Troika submitted the terms of the bail-out program for Cyprus. The Cypriot government expressed disagreement over those terms and continued negotiations with Troika
Sep27th, 2012	Central Bank of Cyprus commissions PIMCO to carry out the an independent due diligence exercise

Nov16th,2012	Moody's downgrade to B3
Nov21st, 2012	FITCH downgrade to BB-
Nov22nd, 2012	Statement on the European Commission website on behalf of Troika claims progress towards agreement on key policies of a macroeconomic adjustment program
Nov 30th, 2012	Christofias administration announced agreement reached with Troika on bail-out terms with only the financial sector package pending
Dec 13th, 2012	Euro-Group statement took notice of the progress made at the staff level
Jan 10th, 2013	Moody's downgrade to Caa3
Jan 25th, 2013	FITCH downgrade to B
Feb 17th, 2013	First Round of Presidential Elections in Cyprus
Feb 24th, 2013	Run off round between DISY candidate Anastasiades and AKEL candidate Mallas. Anastasiades elected President with 57.48% of the vote
Feb 28th, 2013	Anastasiades administration is sworn in
Mar 15-16th,2013	First Euro-Group: agreement to impose a levy on all (insured &uninsured) depositors (6.7%<100,000 9.9>100,000 to collect €5.8bn) in all banks- Capital controls imposed
Mar 19th,2013	Parliament rejects the bank levy bill, part of the bail-out agreement conditionalities, with a majority of 36 MPs against, 19MPs abstained, 1 absent
Mar25th,2013	Second Euro-Group: agreement to bail-in the uninsured depositors of Laiki and Bank of Cyprus only, resolve Laiki and fold the good bank into Bank of Cyprus. Program money will not be utilized to recapitalize the domestic banking sector except for a provision of 1.5bn for Co-operative sector.
Mar 26th,2013	Fitch places Cyprus on negative watch again
Apr 2-3rd,2013	Michalis Sarris resigns from the post of Minister of Finance; Harris Georgiades appointed Minister.
Apr 24th,2013	ESM Board of Directors grants stability support to Cyprus
May 13th,2013	ESM disbursement of €2bn in cash
Jun 3th,2013	FITCH downgrade to B-
Jun 26th,2013	ESM disbursement of €1bn in cash
Jun 28th,2013	Interim report of the Independent Commission on the future of the Cypriot banking sector
Jul 9th-15th, 2013	ESM disbursement of €600mn & €100mn in cash
Jul 30th, 2013	Bank of Cyprus exit from resolution status, recapitalized with 47.5% conversion of uninsured deposits to equity
July 31th, 2013	Staff teams from the Troika visited Nicosia during July 17-31 for the 1st quarterly review
Aug 8th, 2013	Ministry of Finance announcement on a capital restrictions roadmap removal in agreement with official lenders

Sep 5th, 2013	IMF appoints a resident representative in Cyprus
Sep 10th,2013	General Meeting of the new shareholders in Bank of Cyprus convenes to elect a new Board of Directors
Sep 12th,2013	Cyprus and Russia agreement on the restructuring of the 2011 bilateral €5bn loan
Sep 16th,2013	IMF Completes First Review Under EFF Arrangement and Approves €84.7 Million Disbursement
Sep 27th,2013	ESM disbursement of 1.5bn in floating rate notes
Nov 7th,2013	Staff teams from the Troika visited Nicosia during October 29-November 7 for the 2nd quarterly review
Dec15th-19th,2013	ESM disbursement of 350mn &100mn in cash
Dec20th,2013	IMF Completes Second Review Under EFF Arrangement for Cyprus and Approves €83.5 mn Disbursement
Feb 11th,2014	Staff teams from the Troika visited Nicosia during January 29-February 11 for the 3rd quarterly review
Mar10th-11th, 2014	Panicos Dimitriades resigns from Governor-Chrystalla Georghadji announced as successor
Mar 28th, 2014	IMF Completes Third Review Under the EFF and Approves €83.3mn Disbursement
Apr4th,2014	ESM disbursement of 150mn in cash
Apr 25th,2014	S&P upgrade to B
May 17th,2014	Staff teams from the Troika visited Nicosia during May 6-17 for the 4th quarterly review
Jun 30th,2014	IMF Completes Fourth Review Under the EFF for Cyprus and Approves €84mn Disbursement
Jul 25th,2014	Staff teams from the Troika visited Nicosia during July 15-24 for the 5th quarterly review
Jul 29th,2014	Successful €1bn rights issue of Bank of Cyprus with the participation of EBRD and Wilbur Ross
Sept 6th,2014	The Parliament endorsed the foreclosure bills with a majority of 47 votes and 7 against
Oct 24th,2014	S&P upgrade to B+
Oct 25th,2014	IMF Executive Board Concludes the 2014 annual Article IV Consultation with Cyprus
Oct 26th,2014	Announcement of the comprehensive SSM assessment results of four systemic Cyprus banks
Nov 14th,2014	Moody's downgrade to B3
Feb 6th,2015	Staff teams from the Troika visited Nicosia during January 27-February 6 for the quarterly review (no staff level agreement was reached given the suspension of an effective application of the foreclosures framework)
Apr 06th,2015	Full lift of capital controls
Apr 18th,2015	The Parliament endorsed the insolvency framework bills with a majority of 33 votes and 23 against
Apr 26th,2015	Election of Mustafa Akinci in the post of Turkish-Cypriot leader
May 20th, 2015	Based on the recent Troika visit in the island staff-level agreement has been reached on policies that could serve as a basis for completion of the pending reviews.
Jun 19th,2015	IMF Completes Fifth, Sixth & Seventh Reviews of Cyprus' EFF and Approves €278.4 mn Disbursement
Jul 27th,2015	Staff teams from the Troika visited Nicosia during July 14-24 for the 8th quarterly review

Aug 15th,2015	CYSTAT announced the flash estimate of Q2-2015 which showed the second positive QoQ growth
Sep8th,2015	S&P upgrade to BB-
Sep23rd,2015	IMF Completes Eighth Review of Cyprus' EFF and Approves €126mn Disbursement
Sep 25th,2015	S&P upgrade to BB-
Oct10th,2015	ESM disbursement of €500mn in cash
Oct23th,2015	FITCH upgrade to B+
Nov15th,2015	Moody's upgrade to B1
Nov16th,2015	Staff teams from the Troika visited Nicosia during November 3-13 for the 9th quarterly review
Jan27th,2016	IMF Completes Ninth Review of Cyprus' EFF and Approves €126.3mn Disbursement
Mar7th, 2016	Ministry of Finance asks IMF for the early termination of EFF arrangement & Euro-Group supports Cyprus graduation from the economic adjustment program. The last prior action of the completion of the review (CYTA corporatization) was not satisfied
May22nd, 2016	Parliamentary elections: The ruling right-wing party DHSY gained 37.6% (18 seats), the main opposition left-wing party AKEL gained 25.7% (16 seats), and DHKO gained 14.5% (9 seats)
Sep16th, 2016	S&P upgrade to BB
Oct21st, 2016	FITCH upgrade to BB-

Cyprus has made the fastest come-back to international markets among other Euro Area program countries, tapping the markets three times (June 2014, April 2015 and October 2015). This is due to its enhanced credibility. Since March 2013, Cyprus completed successfully nine reviews according to the IMF disbursement schedule and seven reviews according to the ESM schedule.[16] Cyprus ended up borrowing only about €7.3bn out of a total €10bn available under the program. The ESM disbursed a total of €6.3bn, complemented by another €1bn by the IMF. Cyprus' graduation from the program was finalized in the Eurogroup of March 7, 2016. The Eurogroup praised the authorities for the high degree of ownership and their important achievements and approved their decision to exit the economic adjustment program.[17] Later on, Cyprus also graduated from its IMF program as well.

Macroeconomic outcomes came out better than expected in the initial and revised program forecasts. The recession of 2013-2014 turned out milder than expected. The cumulative output losses amounted to 8.3ppts vs. 13.5ppts in the program. The full year contraction of 2013 came at -5.4% vs. -8.7% in the initial program forecast. The full year contraction of 2014 came at -2.5% vs. an initial forecast of -4.8% (in May 2013). The rebound of 2015 also surprised to the upside. The initial program forecast stood at +1.1% in 2015 and then official lenders even revised it downwards in the next reviews: In the 4th review in May2014, the forecast of 2015 had been lowered to +0.4%). In year 2015, GDP growth posted the first positive growth reading after a three year recession. GDP growth expanded by +1.6% YoY, compared to -2.5% YoY in 2014, -5.9% YoY in 2013 and -2.4% YoY in 2012.

A large part of the better than expected performance stems from the fact that the wealth effect of the bail-in and the spill-over effects to the domestic economy were widely overestimated. From a demand point of view, private consumption remained resilient as both consumers and corporates used part of their precautionary savings to smooth out consumption plus the bail-in affected primarily foreigners. On the supply side, economic activity in the sectors of tourism and professional services remained

[16] The last ESM review (the 8th) is not considered to have been completed successfully.
[17] http://www.esm.europa.eu/pdf/2016-03 07%20Eurogroup%20statement%20on%20CY.pdf
The Eurogroup also noted that the last prior action of the last program review with respect to the approval from the parliament of the corporatization of CYTA-the telecom public utility-has not been satisfied. Yet this did not preclude Cyprus' graduation from the program.

relatively resilient as both of them are less credit dependent but also more extroverted and internationally competitive.

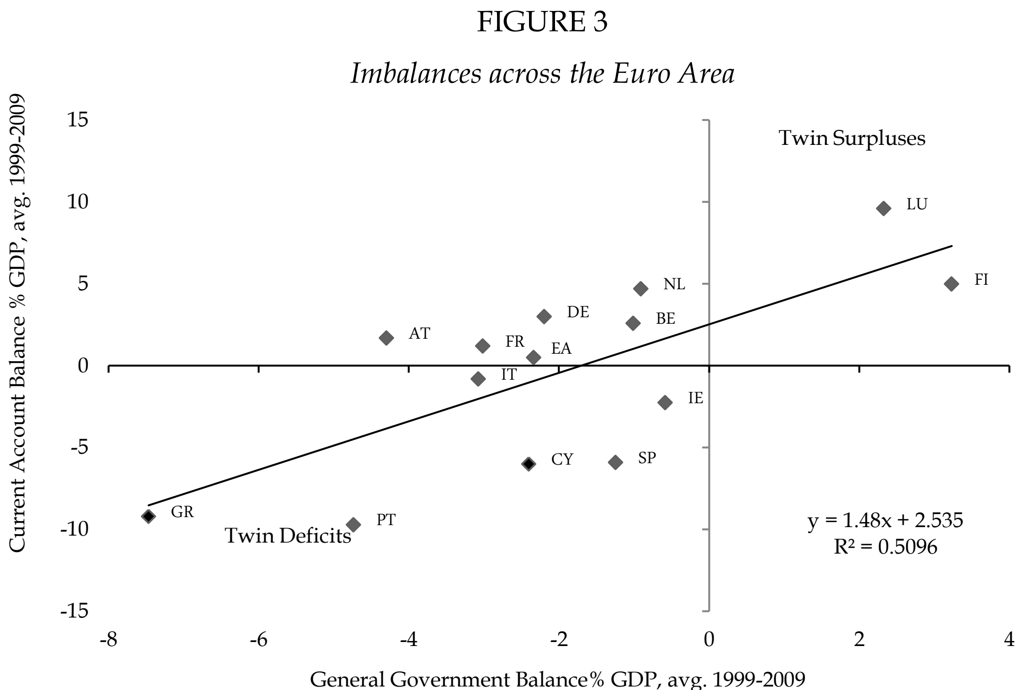
4. Crisis in Greece and Cyprus: A revealing comparison

4.1. Differences prior to the rescue package

Our earlier discussion revealed important differences between the two countries in the factors which led to their respective crises. The first major difference was the much larger fiscal and competitiveness imbalances in Greece. This is shown in Figure 3, which depicts the original EMU countries plus Cyprus, and illustrates the average fiscal (horizontal axis) and current account (vertical axis) balances over the period from 1999, when EMU was created, to 2009, before the start of the Greek and EMU crisis. In both the internal and the external imbalance dimension, Greece was a clear outlier among all EMU countries and carried double the respective deficits of Cyprus.[18] It follows that the required macroeconomic corrections for Greece were twice as big, which naturally led to a much worse recession.

FIGURE 3

Imbalances across the Euro Area



Source: International Monetary Fund.

[18] The crisis in Cyprus started three years later in 2012, hence the figure does not include the large Cypriot fiscal deficits of that period. Yet, still those deficits were small in comparison to the historical Greek ones.

Table 2 presents in greater detail certain economic statistics that characterized each country prior to its respective crisis. The table presents three fiscal statistics (primary balance, general government balance, and gross public debt), three competitiveness statistics (current account, Doing Business indicator, and real effective exchange rate), and two financial sector statistics (private sector indebtness and bank assets). Cyprus' initial conditions were better than those of Greece, except for the financial sector.

Differences in the financial sector present the second major difference between the two countries. Cyprus was initially hit primarily by a banking crisis, which was the result of the large indebtness of the private sector and an oversized banking sector. In Greece, a banking crisis came much later as a consequence of the earlier fiscal and competitiveness crisis and was caused by the PSI and two waves of bank deposit withdrawals by the population. In Cyprus, the banking crisis was felt immediately by the population and its impact was abrupt. Yet, rectifying the problems of the financial sector in Cyprus didn't necessitate a large fiscal austerity, which otherwise would have caused a bigger recession and may have led to population unrest.

A third difference relates to the timing of the crisis, as the crisis in Cyprus came three years after the crisis erupted in Greece. This difference in timing had major implications. First, during the time interval between the two countries' crisis eruptions, Europe managed to develop adequate defense mechanisms to protect the member states from an unwelcome negative shock in any individual state or outside the Union. It created the European Stability Mechanism and had empowered it with funds and discretion to act. It had also employed a new architecture in fiscal matters and had begun the process of a banking union. When the crisis erupted in Cyprus, Europe was not worried about a possible contagion, the way it had worried three year earlier when Greece entered a crisis phase. Thus it could experiment with a bail-in process without having to worry about possible irreversible negative consequences on the rest of EMU.

Second, the external economic environment was also different when the crisis occurred in Cyprus. Europe had already recovered from the international crisis, the recession was a somewhat distant memory and sentiment was rising. Back in 2009, Europe was not yet over the international crisis.

TABLE 2

Initial Conditions prior to the Crisis

	Greece (April-May2010 or 2009)	Cyprus (March2013) or 2012)
Primary Balance[19] (% of GDP)	-10.3%	-2.9%
General Government[20] Balance (% of GDP)	-15.2%	-5.8%
Gross Public Debt (% of GDP)	126.7%	79.3%
Current Account[21] Balance (% of GDP)	-12.3%	-6.0%
Doing Business Distance to Frontier[22] (best = 100)	62.44 *(2010)*	69.1
REER (ULC total economy deflated, 1999Q1=100)	123.0 *(2010Q1)*	110.2 *(2013Q1)*
Private Sector Indebtness (% of GDP)	116.8%	328.3%
Banks assets (% of GDP)	212.7%	750%

Notes: Seven of the eight statistics above refer to full years 2009 for Greece and 2012 for Cyprus. The eighth statistic, the real effective exchange rate (REER), refers to the end of the respective quarters 2010Q1 and 2013Q1. The most recent Doing Business data for Greece and Cyprus are from Doing Business 2017. The earliest comparable Doing Business series available for Greece are dated in 2010. In the Private Sector Indebtness statistic, the numerator refers to the stock of liabilities (loans plus debt securities) held by the non-financial corporate sector and households on an non-consolidated basis, i.e. taking into account transactions within the same sector. The GDP levels in the denominator of the last two financial sector statistics refer to 2009 for Greece and 2012 for Cyprus.
Source: Eurostat, ECB, National Authorities, World Bank Doing Business.

[19 & 18] Without banking sector recapitalization costs (the Laiki Bank Recapitalization Bond of 2012).

[21] BPM6 definition.

[22] World Bank (Doing Business, Distance to Frontier definition): The distance to frontier score aids in assessing the absolute level of regulatory performance and how it improves over time. This measure shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the *Doing Business* sample since 2005. This allows users both to see the gap between a particular economy's performance and the best performance at any point in time and to assess the absolute change in the economy's regulatory environment over time as measured by Doing Business. An economy's distance to frontier is reflected on a scale from 0 to 100, where 0 represents the lowest performance and 100 represents the frontier

Both previous reasons made Cyprus worse off relative to Greece. But there is also a third reason that made Cyprus better off. The difference in timing benefited Cyprus in the sense of being knowledgeable about the potential consequences of different responses to the crisis. Cyprus had the benefit of hindsight, observing Greece and then Ireland and Portugal enter a crisis and responding to it. Each of these countries had a different policy response with their populations behaving differently. The Irish did not strike as much against the austerity measures as the Portuguese or the Greeks did, for example. Cypriots could observe and learn from the different experiences.

Next to timing, a fourth difference originates from the type of political parties that ran the two countries prior to their respective crises. Greece up to September 2009 was run by New Democracy, a center-right conservative party, whereas Cyprus was run by AKEL, a leftist communist party. The economic consequences of this difference may not have been major, however. A closer look at their respective economic policies prior to the crisis reveals important similarities. They both followed expansionary fiscal policies and generated huge budget and current account deficits, which naturally aggravated the pre-existing domestic macroeconomic imbalances.

A fifth important difference between the two countries relates to the speed of concluding the negotiations for designing the rescue package. Greece applied for a rescue package in April 2010 by a relatively new government and within a month it had signed the MoU and the loan money was flowing into the country. In the case of Cyprus, the negotiations for the eventual rescue package prolonged for eight months and in the mean time presidential elections took place and a change of President occurred. Cyprus paid a huge penalty for that delay, as it ended up absorbing a surprising eventual bail-in.

A final sixth difference prior to the rescue package is in the relationship between the government and the central bank. In Greece there was unanimity between the Prime Minister and the Central Bank governor about the required policy responses. This was not the case in Cyprus. President Christofias did not renew the appointment of Governor Orphanides in May 2012 and later tried to cast the banks as the villain, thus aggravating the country's vulnerabilities.

Overall, prior to the rescue package, it seems Greece had tougher domestic initial conditions, while Cyprus faced a more acrimonious external environment and a less robust financial sector. Cyprus was also slow to come to terms with the details of the rescue package.

4.2. Differences in policy responses

Policy responses to the crisis also varied between the two countries both from the lenders' and the borrowers' perspective. In the beginning of the crisis, Cyprus faced more aggressive lenders than did Greece, yet it responded to its crisis more quickly and effectively.

Let us first examine the lenders' perspective. Here lies a major difference. Lenders imposed a bail-in on Cyprus in March 2013, whereas three years earlier, in May 2010, they had bailed-out Greece without even any prior bond haircut. A major argument for the Cypriot bank bail-in was the savings to the Cypriot state and future tax payers. Europeans insisted that Cypriot bank stakeholders be bailed-in in order to clean up the bank balance sheets with own resources, thus saving future Cypriot tax payers a debt burden of €4.9bn or approximately 25% of annual pre-crisis Cypriot GDP of 2012. On the other hand, the bail-in costs were primarily allocated to non-residents, hence softening the negative impact on domestic consumption.

Let us now turn to the policy responses of domestic politicians in the two countries. First, when it comes to program ownership, most Cypriot political parties signed up to the program. Their differences in economic policy were relatively minor.[23] This political agreement – which contrasts to what happened in Greece - filtered through to the population and, unlike in Greece, society was not split into two groups, for or against the MoU. Thus the political and social tensions were relatively moderate despite the painful decisions. Cypriots showed great adaptability and willingness to compromise their living standards thanks also to the dramatic episodes in their post-war history, which may have shaped a certain population psychology of sticking to each other at times of adversity.

In Greece, the major political parties failed to agree on a minimum common denominator. As a consequence, the Greek population remained uneducated about the pre-existing economic imbalances. Most Greeks never understood the true causes of the crisis, and many of them perceived the MoU itself as the cause of their suffering, not that the MoU was there to fix the economy, which itself had caused their troubles. This misconception continues even today by many.

[23] The Presidential political system in Cyprus also helps in reaching a more balanced and consensus point of view. The President can decide on the execution of the economic program and then try to find a majority coalition in the Parliament for the various components of the program. The President can thus push a compromise solution among the different political parties. The same compromise is harder to accomplish in the Greek parliamentary system.

Second, Cyprus has a relative well-functioning government sector and high administrative capacity to carry out structural reforms. The institutional and administrative capacity of Cyprus is very close to the EU average, which implies that the executive body is in a relative favorable position to carry out the necessary structural reforms. Table 3 corroborates this by presenting indices published by world-renowned institutions on the quality of institutions. [24]

TABLE 3

Quality of Institutions

	Cyprus	EA-18	Greece
1.Corruption Perceptions Index 2013 (0-100)	63.0	64.7	40.0
2. Rule of Law 2012 (score -2,5 to 2,5)	1.07	1.23	0.39
3.Government Effectiveness 2012 (score -2,5 to 2,5)	1.38	1.24	0.31

Source: World Bank, Transparency International, World Bank.

Third, in Cyprus the program was executed remarkably well, and in the words of a representative of the lenders, "almost like a clock" (Hardouvelis and Gkionis (2016)). The authorities showed commitment to the program conditionalities and established a strong track record of timely and continued policy implementation. The quantitative targets were met ahead of time and by a wide margin. Thus three years after the MoU, the country had gained credibility, capital controls were lifted and the country graduated from the program.

In Greece, the opposite happened. Politicians tried to avoid delivering on what they had signed, fearing the political cost. The lenders gradually became increasingly dissatisfied and began micro-managing the reform process. For example, the second MoU is relatively voluminous and a lot more detailed than the first MoU. And after the third rescue program of 2015, lenders put a tighter auditing grip to ensure complacency and avert the back-tracking of earlier reforms.

Fourth, in Cyprus the package of fiscal measures in 2013-2014 was decided and legislated upfront, which minimized uncertainties. In addition, the fiscal adjustment was front-loaded, splitting the burden almost equally between revenue enhancing and expenditure spending cuts, thus, making the policy mix of the measures balanced. As the initial IMF MoU[25] & EU

[24] The Government Effectiveness Index, the Corruption Perception Index and the Rule of Law, World Bank & Transparency International.

[25] Page 19, http://www.imf.org/external/pubs/ft/scr/2013/cr13125.pdf

Commission program[26] states: "*The total package of 6.8ppts of GDP was split between 3 ppts expenditure cuts and 3.8ppts in revenue enhancing measures*." Cypriots also resisted the enormous pressure to drastically increase their corporate tax rate, and thus kept their international comparative tax advantage.

In Greece, the inability to come to terms with economic reality resulted in three consecutive rescue programs covering the period from 2010 to 2018, with the third program being self-induced and completely unnecessary. The disastrous policy of the first half of 2015 brought a new recession and reduced asset values further. It caused a huge loss to the State from the collapse in bank stock prices. Since 2015, the Greek government also resorted to over taxing households and businesses, hence stifling away any incentives for work and investment. Since 2015, the Greek policy reaction has been diametrically opposite from the Cypriot experience.

4.3. A different economic trajectory following the outbreak of the crisis

This section compares the evolution of the respective economies after the beginning of the rescue package. Based on the earlier discussion on the initial conditions prevailing prior to the crisis and the different policy responses in the two countries, it ought not to come as a surprise that the economy's negative trajectory after the outbreak of the crisis was much more benign in Cyprus.

Figure 4 sets as date 0 the quarter before the agreement of a rescue package. It then shows the evolution of real GDP in the following quarters. For Greece, quarter 0 is defined to be the first quarter of 2010. For Cyprus, quarter 0 is the last quarter of 2012. At quarter 0, for both countries the level of real GDP is set to be 100.

Figure 4 shows that the depth and length of the recession in Cyprus were much smaller than in Greece. In Cyprus, the lowest point of the recession occurred 10 quarters (2.5 years) after the rescue, when the GDP level was at 90.5% the original GDP level, and then a recovery began. In Greece, a recovery began much later, after 15 quarters and at a much worse GDP point, at 78% of the original level. Moreover, subsequently, the recovery was stopped short by a new phase of the crisis. The figure shows that Greek crisis Phase II currently costs over 6 percentage points of 2012-GDP, or about €14bn per annum.

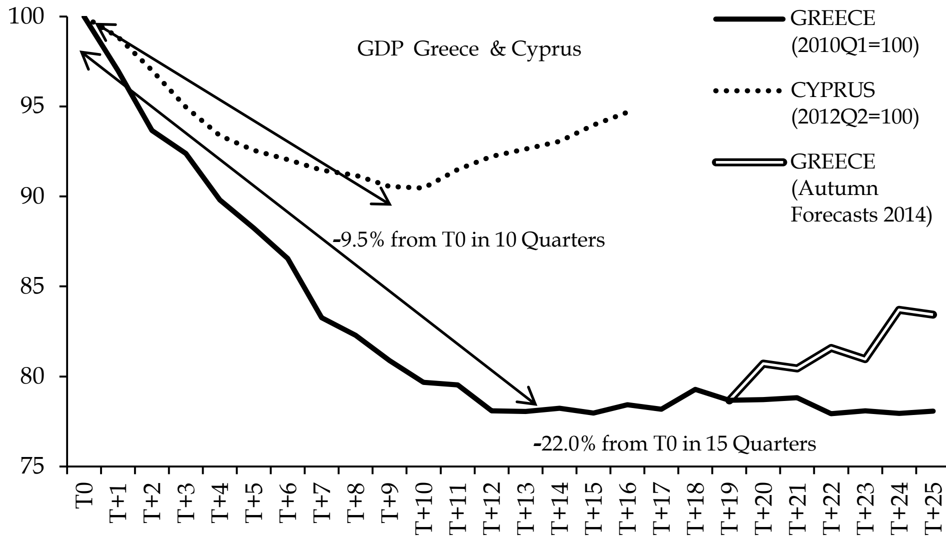
Figure 5 presents a similar story about the rate of unemployment. It shows the change in unemployment relative to date 0, which is the quarter before

[26] Table 4, Page 47: contains the consolidation measures in 2012-2014 http://ec.europa.eu/economy_finance/publications/occasional_paper/2013/pdf/ocp149_en.pdf

the rescue package as in Figure 4. In Cyprus, unemployment went up by 5 percentage points and then, after 11 quarters, began declining. By mid 2016, it is almost back to where it started. However, in Greece unemployment went up by over 16 percentage points and began declining much later, after 14 quarters.

FIGURE 4

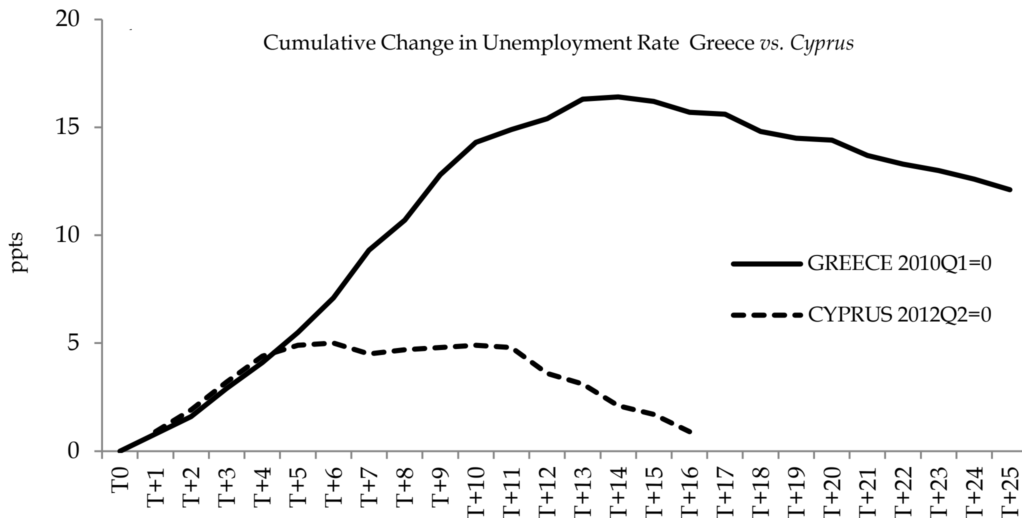
The Evolution of Real GDP after the Crisis Outbreak



Source: Eurostat, Eurobank research.

FIGURE 5

The Evolution of Unemployment after the Crisis Outbreak



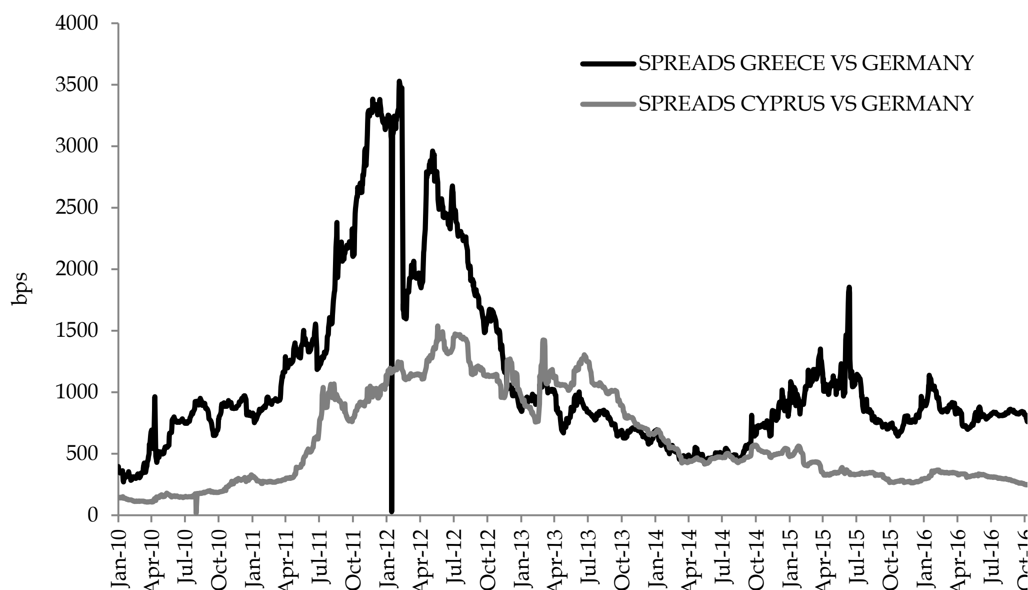
Source: Eurostat, Eurobank research.

4.4 Different perceptions about the crisis and the country abilities to withstand it

Turning to how markets perceive the crisis, Figure 6 presents Greek and Cypriot yield spreads vis-à-vis Germany.[27] Financial markets became more aware of the Cypriot economic problem after the Mari accident in July 2011 and the simultaneous discussions on the Private Sector Involvement (PSI) for Greek bonds, which began in the summer of 2011. The figure also shows that the Cypriot spreads grew higher than the Greek spreads from the summer of 2012 to the end of 2014, essentially during the time of the Cypriot crisis. When Greek crisis Phase II began, the Greek spreads overtook the Cypriot ones for a second time. Another interesting feature is the more or less continuous decline of the Cypriot spreads since July 2013. This is not the case with the Greek spreads, which peaked for a second time in the summer of 2015 and remain stuck at high levels by 2016Q4, around 700-900 bps.

FIGURE 6

Interest Rate Spreads over Germany



Source: Bloomberg.

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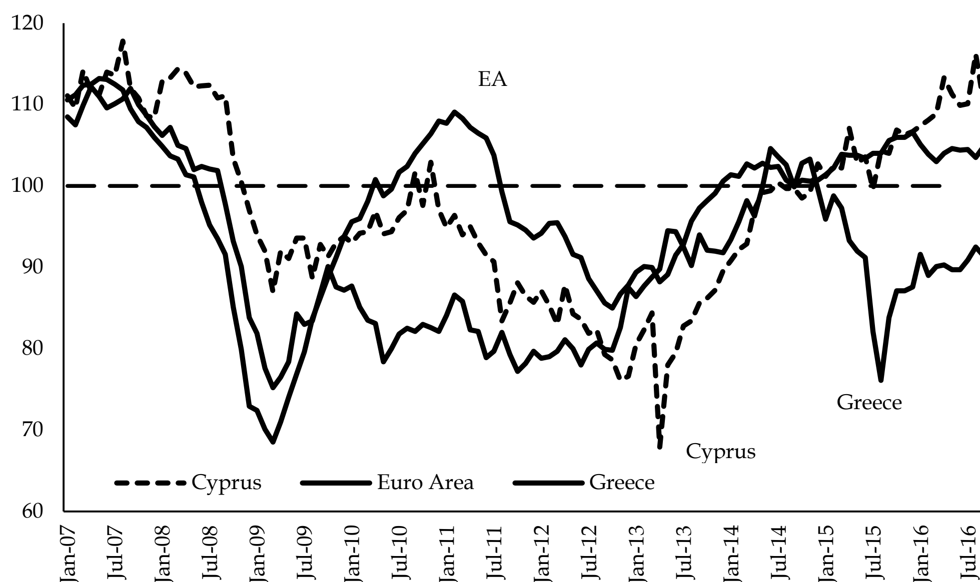
[27] Figure 6 portrays the evolution of the sovereign spreads of the ten year generic Greek government bond vis-à-vis the German one. The same graph also includes the spread of the long-term Cypriot bond of initial ten-year maturity, the last one issued by the Cypriot government in 2010 before the country was cut off from the international financial markets vis-à-vis a German government bond with maturity date very close to that of the Cypriot bond.

Next, it is also interesting to see how the population, households and businesses reflected on the crisis. Figure 7 presents the index of economic sentiment in the Euro Area, in Greece and in Cyprus from early 2007 to the present. It is clear that sentiment in Cyprus follows much more closely the ups and downs of the overall sentiment in the Euro Area than the corresponding sentiment in Greece does. In Greece, there was decoupling from Euro Area sentiment from the fall of 2009 until the fall of 2012, and then again during phase II of its crisis from January 2015 on. By contrast the sentiment in Cyprus shows similar ups and downs as in the Euro Area, even during the Cypriot crisis in 2013.

FIGURE 7

Index of Economic Sentiment



Source: European Commission.

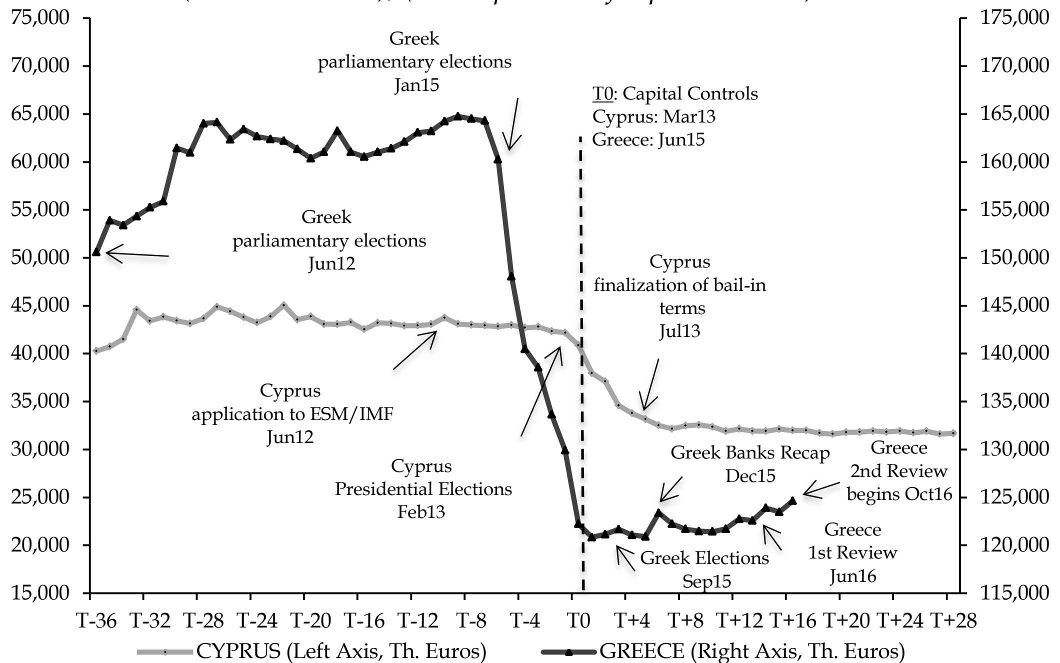
4.5. Different behavior regarding the possibility of capital controls

One of the consequences of the crisis on both countries was the imposition of capital controls. Yet capital controls were anticipated in Greece but came as a complete surprise in Cyprus. Figure 8 shows the behavior of deposits before and after the imposition of capital controls. The difference between the two countries is striking. Deposits fell in Greece before the imposition of capital controls. In Cyprus they remained almost intact before the imposition of capital controls and then fell after the imposition of capital controls (when also some uninsured deposits were transformed into

stocks). On the graph, T0 is defined to be the date on which capital controls were imposed in each country. For Cyprus it is March 27, 2013 and for Greece June 28, 2015.[28] Over the period December 2014 to June 2015, Greece experienced a bank-run in slow motion. In Cyprus, the sharp decline of private sector deposits in Q2 & Q3 2013 was mainly due to the bail-in & the ensuing economic slowdown.

FIGURE 8

Private Sector Deposits before and after the Imposition of Capital Controls (in million euros), (T0=imposition of capital controls)



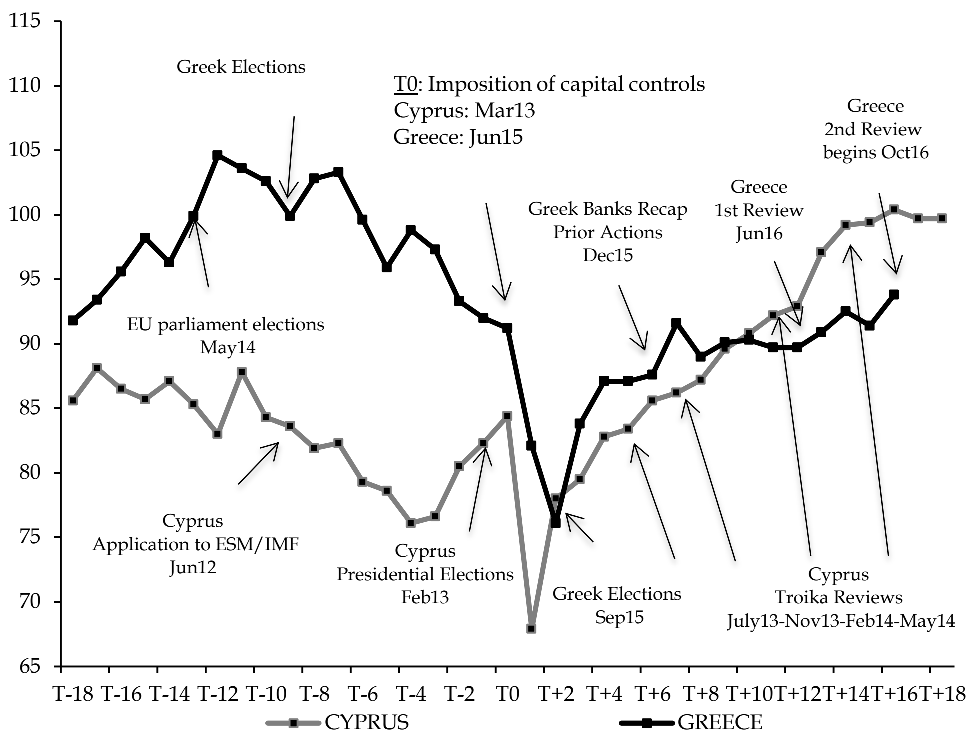
Source: Central Bank of Cyprus, Bank of Greece, Eurobank Research.

Figure 9 portrays the change in sentiment before and after the imposition of capital controls. Here the differences between the two countries are not as striking as in Figure 8. The imposition of capital controls decreased economic sentiment in both countries, which subsequently recovered.

[28] In Cyprus, capital controls were imposed on the last day after a two-week bank holiday after public announcements of the decisions of the Euro group on the restructuring of the banking sector without program funding. In Greece capital controls were imposed concurrently with a bank holiday. They aimed at averting a bank-run after the lengthy multi-month antagonistic negotiations between the government and the international lenders had collapsed.

FIGURE 9

Economic Sentiment Indicator before and after the imposition of Capital Controls (T0= capital controls)



Source: European Commission, Eurobank Research.

4.6. Two major risks confront both countries today

Today Cyprus and Greece face different challenges, yet they do share a common short-term super-risk factor, the issue of bad loans. In both countries, the rate of non-performing loans (using the EBA definition of non-performing exposures (NPEs)) is extremely high, at 49% in Cyprus and 47% in Greece. This rate sets both countries apart from all other European countries, since the next observed worst rate is less than half, in Slovenia 20%and in Portugal 19%. Figure 10 provides a cross-country comparison of non-performing loans as of March 2016. [29] As of March 2016, problematic loans stood at 145% of GDP in Cyprus. The relevant ratio in Greece in December 2015 stood at 61.4% of GDP.

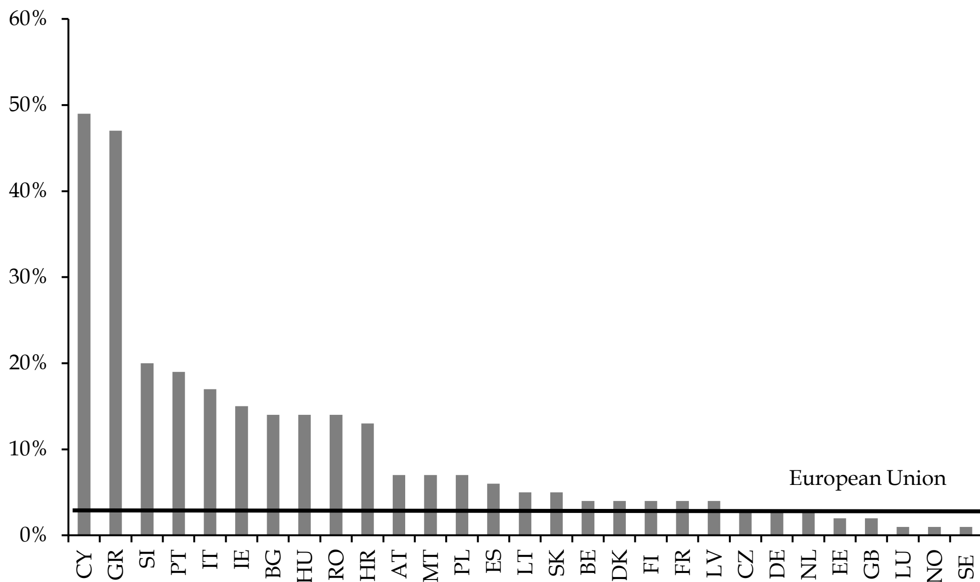
NPLs have begun a declining trend in Cyprus but not so in Greece. In Cyprus, NPEs in absolute levels- began declining in 2015Q2. The formation

[29] https://www.eba.europa.eu/documents/10180/1360107/EBA+Report+on+NPLs.pdf

of new NPLs stopped as the economy started growing, while thanks to the new laws some of the past non-performing borrowers began settling their accounts. As a result, the level of NPEs has declined to €24.7bn in July 2016 down from a peak of €27.8bn in April 2015. Yet, the ratio is still at very high levels mirroring the ongoing deleveraging which impacts the size of total loans in the denominator of the ratio. The NPL reduction is a good piece of news, yet it is too early to be able to say the risk is definitely going down.

FIGURE 10

Non-Performing loans as of March 2016
(% of total loans)



Note: Data provided by EBA on non-performing loans and forborne loans for total on-balance loans and advances per country of origin of the bank (March 2016). These NPL ratios relate only to exposures qualifying as loans, and do not include debt securities or off-balance sheet exposures. For EU banks, the NPL ratio per March 2016 was 5.7% on average.
Source: European Banking Authority.

In Greece, NPLs have not yet stopped growing. They did decline in 2014Q4, but Phase II of the crisis in 2015 caused a resumption of the earlier upward trend. And the more recent NPL laws continue to have gaps. Hopefully, if the economy picks up in Greece, few new NPLs will form and old ones will be restructured. Overall, resolution of the NPL problem is the hardest challenge for both countries.

A second risk factor both countries face is the low rate of private investment. The fall in investment preceded the crisis in both countries and was not entirely due to the real estate sector. It is an issue that has to be addressed. New investment is necessary for the economy's ability to continue producing and achieving high sustainable rates of growth in the long-run.

5. Concluding remarks: Would future policies differ?

The different economic trajectory of each country necessitates a different policy prescription. The successful Cypriot exit from its economic adjustment program in 2016 suggests the best policy for Cyprus is to move along the earlier policy path, being more aggressive on reforms and with a better focused growth model. At the other end, the disastrous Greek experience since early 2015, suggests there is a need for a complete overhaul of current policies or non-policies. Future policies in the two countries should therefore differ in focus and perhaps would differ.

The main question in Cyprus is whether or not a real growth rate in the neighborhood of 3% is achievable over the long-term. For it to happen, Cyprus needs to safeguard its comparative advantages and its macroeconomic stability, continue reforming its economy and begin reversing the earlier fall in investment activity. So far its international comparative advantages are the low corporate tax rate, the low tax wedge on labor costs, the low personal tax rate and an efficient state bureaucracy. Macroeconomic stability prevails at the moment but may easily get off track, especially if the pension system were not fully reformed. Reforms ought to continue and for this to happen, the population must own the reform agenda. And ownership of reforms begins with politicians. During the crisis, Cypriot politicians managed to agree on a minimal common denominator. Hopefully this common understanding will continue. Finally, for sustainable growth, an overall long-term growth strategy is required, which would emphasize innovation and entrepreneurship and would readjust the Cypriot economy's previous dependence away from the financial sector into new promising sectors like energy or information technology.

In Greece the policy prescription is more complicated. Greece is still in recession, so it needs first to reestablish credibility to get out of the current stagnation mode and be able to access financial markets. Then there is the problem of debt sustainability, which has to be solved for Greece to gain access to financial markets. Next, once a cyclical recovery takes hold, attention has to shift towards factors contributing to long-term growth, especially the need for a major reversal in the current policy of over-

taxation, which is suffocating incentives for work, jacks up the cost of labor and tanks competitiveness, keeps domestic and foreign investors hesitant to invest, and restrains economic activity.

In Greece, there is a definite need to focus on the supply side of the economy, minimize bureaucracy and lower corporate tax rates and thus boost domestic production and exports at the expense of domestic demand and imports. In Greece, public and private consumption represent an overwhelming 20%+70.2% = 92% of GDP, when the corresponding (EA-19) EMU average is only 20.7%+54.8%=75.5%. This excess demand relative to the economy's productive capacity necessitates a future relative shrinkage in domestic aggregate demand. While consumption ought-not shrink in absolute terms for otherwise a continuing recession cannot be avoided, future growth ought to be higher in investment and exports relative to the growth of consumption.

The flip side of the Greek domestic excess aggregate demand is a very low domestic savings rate, which is incapable of supporting domestic investment. Thus FDI is desperately needed and for this to occur, policy credibility is a necessary condition. So credibility is necessary not only for the cyclical recovery and the exit from crisis phase II, but also for a sustainable rate of growth over the long-run. Yet credibility was destroyed over the last two years in Greece and its reinstatement remains a challenge. Crisis Phase II and the forces behind it are hard to erase from households' and enterprises' memory. Capital controls are still in place, the over-taxation continues, the unemployment rate is still high, the youth is immigrating abroad, many companies are registering abroad, and economic sentiment remains low.[30]

Despite their large differences, some of the challenges are similar to both countries. The first such challenge is the high rate of non-performing bank loans. As a response to the NPL problem, both countries introduced new stricter laws that govern corporate and personal bankruptcy (insolvency framework), foreclosures and moral hazard.[31]Those laws aim to provide

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[30] In the midst of Greek crisis Phase II, European lenders seemed to have abandoned hopes of a quick Greek reinstatement to normality and thus never seriously challenged the coalition government for a rational economic policy path. They allowed them to generate fiscal savings exclusively from taxation, something they had never allowed earlier governments to do prior to 2015. The other lender, the IMF, apparently sensed the trouble with the new Greek political leaders early on and thus has refrained from giving any new loan money at all, insisting on the continuation of reforms, the overhaul of the pension system and on a big fiscal break on the part of Europeans, which would come in the form of lower future primary surpluses and a more generous relief in the present value of public debt.

[31] To facilitate the restructuring of troubled loans, banks have put in place restructuring units. However, a state-backed asset-management company (AMC) was not created in

adequate incentives for voluntary debt restructuring negotiations, as well as measures to facilitate the creation of a distressed debt market to enhance the quick reduction or transfer of NPLs. Hopefully a growing economy will also help reduce the problem gradually.

A second common challenge originates from the low rate of investment activity in both countries. The decline in investment predates both countries' economic crisis. It needs to be addressed with active policies, something that is missing from the current policy debate. After all, a higher rate of investment is a necessary condition for persistent long–term balanced growth.

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either country perhaps because of the lack of fiscal space and given debt-sustainability concerns, limiting the ability to provide either direct state funding or government guarantees.

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