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"Boom and Bust of the Spanish Economy"

by

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Boom and Bust of the Spanish Economy

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Abstract

Spain has experienced many financial crises through its history. These financial crises have varied origins. However, they do have common threads. The current recession and subsequent debt crisis follow the same pattern. The fiscal and monetary policies of the Spanish government have played a role in creating and prolonging the boom and bust cycles. Government spending, government regulation, credit institutions, budget deficits, the political climate, and international trade are discussed to illuminate the causes and effects of these business cycles. The Spanish government can take action to improve the economy and to lessen the effects of its financial crises.

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Boom and Bust of the Spanish Economy

I. Introduction

The recent global economic crisis has caused renewed interest in the study of past periods of economic decline. The current crisis that started in the United States became a worldwide phenomenon. Small European countries have been affected, including Portugal, Ireland, Greece and Spain. A recent article states that "The growing fear is that the fallout from Greece and even Portugal — which together compose just five percent of European economic activity — could be a mere sideshow if Spain, with its much larger economy, has difficulty repaying its debt" (Kulish and Thomas, 2010).

This paper examines the history of Spanish economic crises with particular attention to the effects of policies enacted by the government. The paper shows that government budget deficits have contributed to repeated 'boom – bust' cycles. Examining the Spanish economy from its pre-industrial period to the present, one observes recurring trends among the various crises.

The reminder of the paper is organized as follows. Section II presents a brief literature review. Sections III and IV describe the economic crises of pre- and post-industrialized Spain, respectively. Section V discusses the current Spanish financial crisis. Section VI concludes.

II. Literature Review

The recent subprime mortgage crisis and its repercussions have stimulated renewed interest in the study of other financial crises. Demirgüç-Kunt and Detragiache (1998) and Laeven and Valencia (2008) identify crises by determining if one of several conditions is met. These factors include the ratio of non-performing assets to total assets in the banking system exceeding ten percent, the cost of a government rescue operation being at least two percent of GDP, and banking sector troubles resulting in a nationalization of banks, or large bank runs.

Kaminsky and Reinhart (1999) show that generally, a multitude of weak economic fundamentals precede economic crises. Bordo (2003) examines boom-bust cycles in both the United States and abroad, and concludes that recessions originated in stock market crashes are deepened only if there were already elements of financial instability (see also Bordo, Eichengreen, Klingebiel and Martinez-Peria, 2001; Bordo and Jeanne, 2002) , . Garcia-Herrero and Del Rio (2003) use a sample of seventy-nine nations between 1970 and 1999 and find that when the objective of the central bank is price stability, the likelihood of a banking crisis is reduced. Suarez and Ceron (2006) provide international evidence on hot and cold housing markets. Čihák (2007) shows that the more independent the central bank is, the more stable the financial institutions are.

Reinhart and Rogoff (2008, 2009a, 2009b) claim that parallels can be drawn between crises in the United States and other countries. Boyd, Nicolo, and Loukoianova (2009) question whether a "banking crisis" is actually a crisis in the banking system or just a response to government interventionist policies. Shachmurove (2010A, 2010B) investigates financial crises in the United States in the last two-hundred years, finding common trends. However, Klomp (2010) claims that there is no common factor that causes crises.

Economic and financial crises of the Spanish economy have been a subject of study for many years. Harrison (1985) studies the Spanish economy in the twentieth century. Lieberman (1982) investigates the growth and crises of the Spanish economy from 1940 to 1982. Lieberman (1995) updates his coverage of the Spanish economy for the period ending in 1993.

Harrison (1993) analyzes the era stretching from the Spanish civil war to Spain's admission to the European community in the year 1986.

III. Pre – Industrial Spain – Sixteenth Century to 1960s

Spain was a primarily rural, agrarian society from the sixteenth century through the first few decades of the twentieth century. Its industrialization was delayed compared to other Western European countries. It was only in the 1920s that the Spanish manufacturing output began to exceed agricultural output (Soltsen and Meditz, 1988). Nevertheless, Spain had its share of financial woes, as early as the "Age of Exploration."[1]

III.1 The Sixteenth and Seventeenth Centuries

The discovery of precious metals in the Americas marked one of the first periods of dramatic growth in the Spanish economy. A sudden increase in the supply of the primary forms of currency (gold and silver) led to prosperity and growth. However, the inflation that resulted from the discoveries was disregarded. Individuals and entities invested beyond their means. The value of gold and silver fell, and Spain as a whole defaulted on various debts in the early seventeenth century. This, combined with the significant spending and losses in war efforts against the Dutch and the French throughout the seventeenth century, led to a series of defaults in the sixteenth and seventeenth centuries (Reinhardt and Rogoff, 2008, p. 70-71).

III.2 Banking Crisis, 1846- 1847

[1] The Age of Exploration began in the early 1500s, and was a period when Western European countries explored other continents in search of raw materials and trade.

Over two centuries later, Spain overcame default on external debt. However, the external debt led to a pattern of chronic defaults on banking obligations for many years. In general, the average length of time a country spends in a state of sovereign default is greater than the average time spent in financial crisis due to crippling effects on trade and investment (Reinhardt and Rogoff, 2008, p.148-9). One of the major banking crises of the nineteenth century occurred in 1846-1847 due to a conflict between The Bank of Ferdinand and The Bank of Isabella II. The Spanish government created the Bank of Isabella II to penalize the Bank of Ferdinand for its debt obligations due to financing the opposition in the Peninsula War which lasted from 1807 to 1814. However, eventually the two banks merged in 1844 and the Bank of Ferdinand assumed the debts of Bank of Isabella II. The Bank of Ferdinand then relied on the state to rectify shrinking cash reserves, embezzlement issues, rising loan demand, and circulation increases. This crisis encouraged the Spanish government to form the new Bank of Spain, modeled after the Bank of England, in 1847.

III.3 An Agricultural Crisis

In the nineteenth century, the Spanish countryside was suffering from an "agricultural crisis" (Harrison 1985, p. 17). Spanish industry at this time relied heavily on demand generated by crop yields. Spanish farmers under the Latifundio (large estate) and Munifundio (small farm) systems were allotted small plots of land which allowed for only basic subsistence farming. Furthermore, a potato famine affected thousands of people in 1850, and a Phyloxemia epidemic affected the wine industry in the 1870s and the 1880s. Farmers also faced new competition from countries such as the United States, where westward expansion encouraged a myriad of new agricultural activity.

There was limited government support by the Spanish monarchy for farmers or industry. The population and economy as a whole was periodically burdened with unemployment and poverty. Emilio Rui, a distinguished economist of the time, commented that Spain did not match the development of other Western countries during World War I (WWI) due to lack of technical education, poor infrastructure, an ineffectual government and the extremely defective organization of the Bank of Spain (Harrison, 1985, p. 35).

III.4 Insolvency of "Banco Central"

The regime of Miguel Primo De Rivera, from 1920 to 1930, laid the foundation for the Spanish industrialization, by constructing the necessary infrastructure, mainly roads and railroads, for development. The industrial sector was subsidized (Soltsen and Meditz, 1988). However, even though part of the spending was funded by income taxes, this period was characterized by a significant budget deficit. Figure 1 shows the Spanish budget surplus/deficits from 1909 to 1923 (Harrison, 1985, p. 43). The deficit increased from 147 million pesetas in 1913 to 1,103 million pesetas in 1921 – 1922. The Finance Minister Jose Calvo Sotelo was one of the main proponents of spending and reforms. He denied that the deficit existed, and disguised it by introducing various "extraordinary budgets." The deficit nevertheless could not be ignored. Between 1925 and 1927, 6,334 million pesetas of debt were floated, an increment of 75 percent (Harrison, 1985, p. 66). This resulted in steep inflation causing the value of the Spanish currency to drop. Bank runs in 1924 led a number of financial institutions to declare insolvency, including Banco Central, one of the largest banks in Spain at the time (Toniolo, 1997; Feinstein, Temin, and Toniolo, 2008, p. 44). After the downfall of De Rivera in 1930, most of the infrastructure plans were abandoned, due to concern about rising inflation and a larger budget deficit (Harrison, 1993, p. 16).

III.5 Summary of the Spanish Economy Prior to the Great Depression

Before the Great Depression, the major economic crises that affected Spain can be grouped into two types. At times, inadequate government infrastructure and support left citizens vulnerable to extreme 'boom and bust' cycles. This is evidenced by the agricultural crisis in the mid -nineteenth century, and the unwillingness of the Spanish government to aid financial institutions in the early twentieth century. However, excess government involvement - especially when accompanied by large budget deficits - led to problems because of the gold standard, and the need for substantial reserves. This was apparent as early as the sixteenth century as evidenced by bank spending on the Peninsular War and over-investing in infrastructure by the De Rivera Administration from 1920 to 1930.

III.6 Spain during the Great Depression

The depression that struck most of the Western world shortly after World War I, continuing into the late 1930s, had a comparatively mild effect on the Spanish economy. The decrease of production in Spain was significantly lower than in other regions. Scholars attribute this resilience to two factors. First, government raised wages in large industries, ignoring the resulting inflation, in order to counter downturns in some sectors of the economy. Second and more important, Spain was relatively inactive in international trade. It did not rely on foreign demand and exchange rates as much as other European countries (Harrison, 1985, p. 83, Bernanke and James, 1990).

Other notable factors that contributed to the lack of depth of the recession during the worldwide Great Depression include a wave of immigration from Latin America, which helped boost agricultural labor and production, emigrant remittances, and returns on foreign investment (Harrison, 1985, p. 85). Furthermore, Spain did not follow the gold standard during this time, enabling the Bank of Spain to lend freely to entities in need (Bernanke and James,1990; Temin, 2008).

Table 1 shows the Spanish industrial production, compared with North America, Europe, and the rest of the world from 1929 to 1933. While there was a sharp drop of almost twenty points in the index measuring industrial production in North America, and a decline of around ten points in Europe, the Spanish production index only decreased by about two points. The Spanish economists Fontana and Nadal (1976) noted that the main economic problems Spain faced during the Great Depression resulted more from internal structural problems, especially in agriculture, than from any external factors (see also Harrison, 1993, p. 16).

III.7 The Aftermath of the Spanish Civil War

The Spanish Civil War, which began in 1936, was a three-year struggle between the Spanish army and the government under Manuel Azana. The period of 1936 to 1939 represented a protracted era of autarchy, a time of extreme protectionism leading to stagnation, though protecting the domestic sectors had been an element of the Spanish economic policy since the end of the nineteenth century. The war was a monetary burden financed by the sale of treasury bonds, the use of substantial gold reserves from the Bank of Spain, and foreign aid from Germany and Italy under Hitler and Mussolini, respectively (Harrison, 1985, p. 116).

The conflict had debilitating and lasting consequences. The national income decreased by more than a quarter, falling from around 442,753 million pesetas from 1930 – 1935 to 328,647 pesetas in 1940 (Harrison, 1985, p. 117). The government exhausted most of its reserves. The infrastructure of both industry and agriculture was substantially damaged, decreasing productivity from 1939 on.

The outbreak of World War II (WWII) increased spending burdens on the economy, and Spain entered a severe depression which lasted almost a decade (Soltsen and Meditz, 1988, p. 2). During and after WWII, Spain was characterized by high public debt, economic stagnation and high inflation (Lieberman 1995, p. 26). Table 2 demonstrates the extent of the decline in the Spanish industry. From 1930 to 1931, industrial production dropped around ten points and declined again by about fourteen points from 1939 to 1940 (Lieberman, 1995, p. 18).

The Spanish government under Francisco Franco responded to economic stagnation by championing a wave of protectionism and self- reliance.[2] The government became increasingly involved in the private sector, passing in late 1939 the "Law of Protection and Development of National Industry" and the "Law of Regulation and Defense of National Industry." The lack of imports under new regulations, however, led to shortages in raw materials, goods and services. Attempts to counter economic distress, such as overvaluing the peseta, and increased government spending, only worsened economic woes by raising inflation. Spain received credit of around $264 million from Argentina towards the end of the 1950s, which helped with its growing deficit, but a wave of criticism against autarky had already begun (Harrison 1985, p. 131; Bowen, 2006).

III.8 Rebellion against the Franco Regime

Although the 1950s was not a time of significant economic liberalization, the Franco regime did respond to the stagflation of the 1940s by lifting some of the constraints on trade, and on the activities of firms, banks, and other entities. The response was an economic "boom"

[2] Francisco Franco was a Spanish military general and head of state of Spain from October, 1936 and de facto regent of the nominally restored Kingdom of Spain from 1947 until his death in November 1975.

characterized by growth in both agriculture and industry. Spain also benefited greatly from aid provided by the United States.

In 1956, a series of events troubled the Franco administration. A sharp increase in the cost of living caused labor strikes demanding higher wages. Wage increases and government intervention then led to inflation. Inflation rose from 9.1 percent to 15.5 percent in one year (Harrison 1985, p. 138). Additionally, cold weather at the time impacted farmers and workers in rural Spain, who were receiving little government aid. Furthermore, the Spanish gold reserves were falling, and there was a possibility of sovereign bankruptcy. In an attempt to counter the growing crisis, the Franco government reexamined its economic policy, creating government committees for economic affairs, transportation, and communication (Harrison 1985, p. 139). The Spanish multiple exchange rate system was overturned. Interest rates were frozen to counter inflation, and new tax reforms added additional government revenues. The 1959 reform was aimed at both stabilizing the economy and reforming it. While the stabilization policy proved successful, the reform did not. The opening of the economy to international trade and finance, however, increased the rate of growth and led to a substantial rise in the inflow of foreign investment.

III. 9 The Spanish Economy from the Great Depression to Industrialization

From the establishment of significant government infrastructure in the 1920s until the 1960s, there seems to be a general pattern. Excess government spending and substantial intervention in the private sector, whether because of economic growth or because of economic problems, have contributed to diminished reserves, decreased productivity, and high inflation. These factors start or further aggravate crises. The Spanish economy during and after the Spanish Civil War that lasted from 1936 to 1939, and during the Franco administration, was in a far worse state than it was under the free-market system of the 1950s. The basic infrastructure and the sound regulations of the 1950s helped increased economic growth, and standards of living.

IV. Spanish Economic Crises after the Spanish Industrial Revolution

While the world was entering a recession from the late 1960s to the middle of the 1970s, Spain was undergoing unprecedented economic growth. According to the Bank of Bilbao, as shown in Table 3, Spanish GDP increased at an annual rate of around 7.5 percent from 1961 to 1973 (Harrison, 1985, p. 144). Spain benefited from a free-market economic structure, foreign aid, and currency remittances from Spanish citizens abroad (Soltsen and Meditz, 1988). Agricultural and industrial productivity greatly increased with mechanization and technology. The prosperity persisted until 1975, the year of General Francisco Franco's death.

IV.1 The Energy Crisis During the 1970s

The dramatic rise in oil prices in 1973 and 1979 had a great impact on the Spanish economy. For some time, the consequences of increased oil prices was not given due attention because of political concerns during the transition of governments after the death of General Franco. Spain imported more than 70 percent of its energy needs, especially from Middle Eastern countries (Soltsen and Meditz, 1988, p. 6). The increase in the price of a crucial resource reduced productivity across the Spanish economy. Demand for oil remained high, causing many entities to incur substantial losses. As a result, unemployment drastically increased, from 2.94 percent in 1974 to 17.06 percent of the labor force in 1982 (see Table 4). High oil prices also contributed to a government budget deficit, which, as in previous crises depleted national reserves and led to high inflation.

In the late 1970s, Spain joined the other "big five" nations, Norway, Finland, Sweden, and Japan with banking crises caused by the shakedown of their most prominent credit institutions (Thorvald, Solheim and Vale, 2004; Reinhart and Rogoff, 2008, p. 27). The Spanish government rescued twenty-four financial institutions between 1978 and 1983 (Caprio and Klingebiel, 2003). This placed an additional burden on its already depleting reserves to about 16 percent of GDP (Vale, 2004). The remaining fifty-two banks in the system also experienced solvency problems. The crisis fit a typical boom-bust pattern. A boom in real housing prices was followed by a notable decline in years to follow. This banking crisis confirmed that such crises in advanced economies from 1970-2001 tended to occur either at peak housing prices or right after a "bust," as Bordo and Jeanne (2002) note.

The recovery from the energy crisis in Spain was gradual, after the election of Felipe Gonzalez.[3] The new socialist government opted for "pragmatic, orthodox monetary and fiscal policies" (Soltsen and Meditz, 1988, p. 7) in order to quell inflation and reduce the expanding budget deficit. Efficient energy policies were introduced, and struggling government entities were eliminated. Once again, pragmatic and structured government support helped reverse the economic crisis. As the price of oil stabilized, tourism and foreign investment increased, and economic growth continued through the 1980s (Soltsen and Meditz, 1988).

IV.2 The Crisis of the 1990s

The rate of GDP growth of the Spanish economy began to slow from an annual rate of 5.2 percent in 1988 to 4.8 percent in 1989, to 3.7 percent in 1990, and 2.5 percent in 1991 (Lieberman, 1995, p. 334). This deceleration of growth can be attributed to the allocation of

[3] Felipe Gonzalez served as Prime Minister of Spain for four successive mandates from 1982 to 1996. He remains the longest-serving Prime Minister of Spain to date.

funds to consumer goods, rather than to investment, particularly in industry. Throughout the 1980s and the 1990s, manufacturing industries used old business models and relied on the Spanish government to minimize global competition. Consumers increased their purchases of foreign goods. Spanish exports decreased, resulting in a larger international trade deficit. Additionally, Spain had a government budget deficit and relied on other European countries for financing. The Spanish government allocated funds to importing foreign goods and services, rather than investing in domestic industries. Spain once again faced high inflation.

Some argue that until the appearance of the Popular Party in the mid- to late 1990s, Spain had a very weak “spirit of capitalism” (Lieberman, 1995, p. 339). Once again, substantial government intervention, with policies that barred innovation and did not contribute to productive investment but to a growing budget deficit, caused another, albeit mild, crisis. The economic policy of Rodrigo Rato, the Minister of Economy and Finance between 1996 and 2004, advocated less government spending, and lower interest rates to spur investment. These policies reversed the downward trend in annual growth of the Spanish GDP (Encyclopedia of the Nations, Spain, 2007-2010). This led the European Economic Advisory Group (EEAG) to call the twelve years from 1995 until 2007, the Spanish “Golden Decade” (EEAG, 2011).

V.1 Spain and the Subprime Mortgage Crisis of 2007-2008

Spain had a major role in the subprime mortgage crisis of 2007, largely due to the issuing of 40-year loan products (Crawford, 2006). Unemployment more than doubled from almost 8.6 percent in the fourth quarter of 2007 (Banco de España, 2007) to 19.3 percent by September of 2009 (United Nations Department of Economic and Social Affairs, 2010). Relative to other twenty-seven European countries, Spain experienced a sharp decline in construction from 2007 to 2009 (Figure 2). Similar to most countries that bought and sold subprime mortgages, the effects of the recession still prevailed long after economists declared the recession over in late 2009. Like most of the Western world, Spain used politically controversial stimulus measures undertaken by the Bank of Spain. The aim was to increase lending and avoid an economic contraction expected to ensue when the market eventually fell. The Central Intelligence Agency (CIA, 2011) and the Brookings Institution (Prasad and Sorkin, 2009), estimate that the Spanish cost of the stimulus program in 2009 was about 5.7 percent of its GDP.

Moody's, the ratings agency, had announced at the time that it would consider reducing its rating on over €16.9 billion Spanish mortgage-backed securities, to adjust for the rising default rates and declining home values. Furthermore, Moody's estimated that the average Spanish homeowner had a debt-to-income ratio above the forty percent benchmark recorded in 2005, which it deemed problematic (Hugh, 2008).

The Spanish economy bottomed out from its subprime mortgage crisis in the week of March 2, 2009 (Figure 3). Spanish loans further rose in May of 2009 to €27.76 billion or 1.5 percent, up from €12.05 billion relative to the 2008 baseline. The AAA rated Spanish mortgage debt is considered to be the riskiest in Europe. Global investor demands for the securities have soared from 85 basis points above Euribor (Euro Interbank Offered Rate) in 2007 to 240 basis points above Euribor in mid-2008 (Hugh, 2008).

To further illustrate the crisis of the Spanish market, in the first half of 2008, retail sales were down by 7.9 percent. The country launched an unsuccessful attempt to stimulate the economy by requiring one million electric cars by the end of 2014 (Hugh, 2008), and by 2010 the deficit ran up to just short of 10 percent of GDP (CIA World Factbook, 2011). Spain also imports all of its fossil fuel, making it more susceptible to inflationary risks. Thus the 5 percent inflation that occurred in early 2008, followed by the burst of the property bubble in late 2008, and the decrease of stock prices in early 2009, shifted concerns to the risk of deflation instead (Reuters, 2009).

A related theory for the mechanism behind the current Spanish crisis holds that the entrance of Spain to the European Monetary Union led to low interest rates which caused increased demand for construction and higher inflation. This combination dampened self-corrective influences, leading to over-investment in construction and the housing bubble which was doomed to burst (EEAG, 2011).

Some claim that the recent turmoil can be traced to the 1970s and resulted from a combination of Spanish banks taking full advantage of loose monetary policy (Figure 4). Additionally, Spanish economic growth was highly reliant upon the housing boom from the late 1990s through 2007 (Figure 5). The European Central Bank (ECB) published an examination of the average government debt-to-GDP ratio and the per-capita GDP growth rate for several countries dating to 1970, including Spain (Checherita, 2010). This examination reveals the means through which government debt, both in absolute levels and in rate of change, impacts economic growth including private saving, public investment, total factor productivity, and sovereign long-term interest rates, both nominal and real. Checherita, (2010) suggests that when debt rises above 90-100 percent of GDP, it harms growth. The debt Spain incurred through loans from the ECB dating to 1970 clearly had an adverse effect on its economic growth.

The Spanish economy was particularly reliant upon construction. From 2003 to 2006, annual percentage changes for construction and housing far exceeded all other sectoral demand for credit. During the same period, home purchases comprised the largest annual percentage change for credit to individuals (Banco de España, 2008). Once the ECB reversed its policy, recession set in, similarly to other member countries of the Organisation for Economic Co-operation and Development (OECD). The proponents of this viewpoint maintain that reliance upon fiscal stimuli has resulted in large public deficits and expanding debt. Rather than improve the economic condition of Spain, that reliance has worsened it.

Spain has been struck during the crisis by extremely high levels of unemployment, which have soared from around the European Union (EU) average to over twenty percent (Figure 6). Some claim that this phenomenon is tied to its labor market structure and overdependence on the construction sector. The importance and concomitant fall of the Spanish construction sector led to notable unemployment levels, especially among its young population, estimated to be as high as forty percent. The Spanish economy finds itself restructuring away from construction, so that the job loss in this sector is often permanent (EEAG, 2011).

Short-term contracts, which are beneficial in times of prosperity, are reversible in times of crisis, leading to rapidly increasing unemployment. The *temporary* employment rate in Spain has exceeded thirty percent. This can be contrasted with France where temporary employment has been around half that of Spain, hovering around fifteen percent over the same period, since around 1992 (Bentolila, Dolando and Jimeno, 2008). Prior to the crisis France had a comparable total unemployment rate to that of Spain, but its unemployment stayed below ten percent during the financial crisis, about in line with the EU average, whereas the unemployment rate in Spain shot to about 20 percent, double the one in France (Eurostat, 2011).

V.2 An Analysis of Crises in Modern Spain

The current financial crisis in Spain, along with crises of recent decades, is an interesting fusion of trends. As with other economies, one could point to lax government regulations, attesting that the lack of oversight contributed to risky methods of investment, which led to the crisis. However, government attempts to remedy the downturn of the housing market through aggressive policy were not effective. The Spanish budget deficit is at the time of this writing, a source of international concern.

Moderate government spending in areas which foster investment buffers the economy and contributes to economic growth. The impact of excessive spending by the Spanish government has implications for other countries, like the United States, that have turned to government stimulus and lower interest rates as the means for ending recessions.

The Spanish government is currently focusing on alleviating the impact of the crisis by cutting taxes and extending unemployment benefits. The expanding budget deficit, however, will eventually lead to higher taxes, lower government services and reduced social benefits.

VI. Conclusion

Many factors contribute to financial crises, and to ‘boom bust’ cycles that are typical of a capitalist economy. However, some measures can and should be taken to lessen the intensity of financial crises. Specifically, Spain needs to decrease its exorbitant budget deficit. This deficit has contributed to inflation and to excessive government control of the economy, stifling private investment and economic growth. Prudent government involvement with limited regulations may prevent risky ventures and investment. This is probably easier claimed than actually acted upon, due to the extremely high unemployment rate that drives out Spain’s most talented and skilled labor force.

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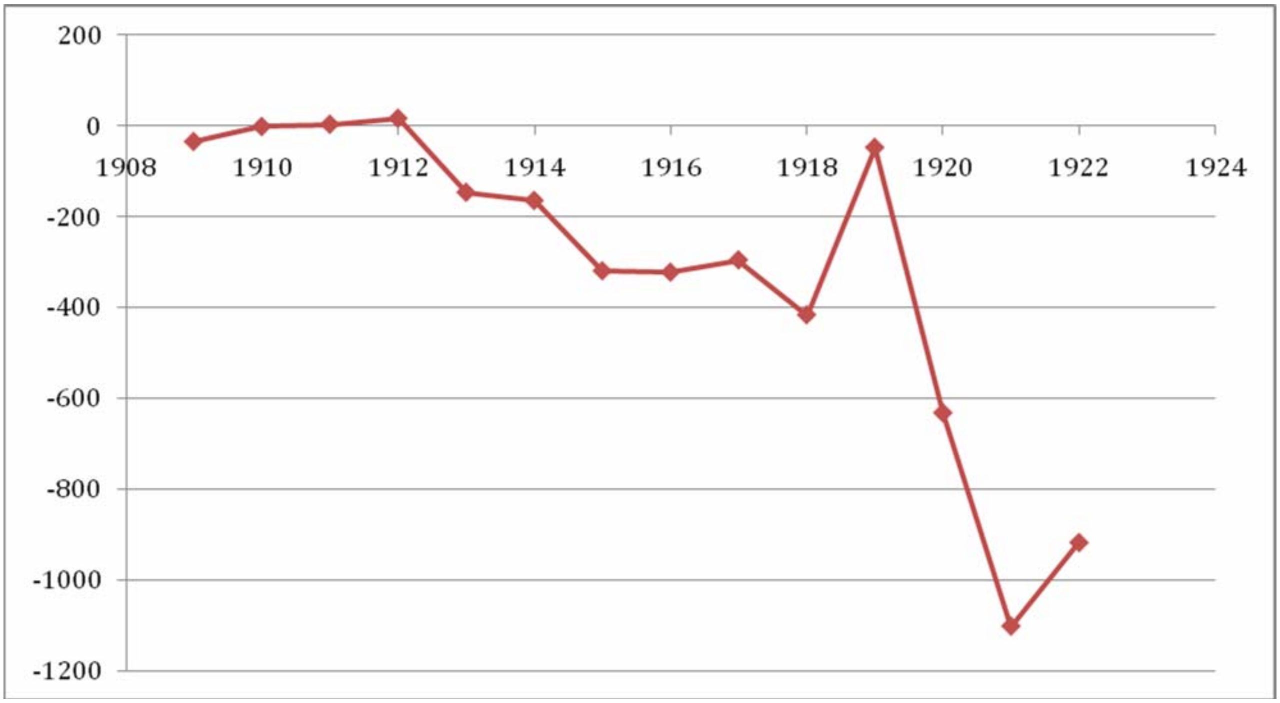
Figure 1: Spanish Government Budget Surplus / Deficits, 1909 - 1922 (millions of pesetas)



Source: Harrison, Joseph (1985), *The Spanish economy in the twentieth century*. New York: St. Martin's Press, p.43.

Table 1: Industrial Production Indices, Spain vs. North America and Europe, 1929-1933

Year	Spain	North America	Europe
1929	100	100	100
1930	98.6	80.9	91.6
1931	93.2	68.4	80.7
1932	88.4	54.4	70.2
1933	84.4	64.3	76.3

Source: League of Nations, Statistical Yearbook, 1937 – 1938, “Mineral and Industrial Production.”

Table 2: Spanish Industrial Production Index from 1929 – 1941

Year	**Carreras**
1929	100
1930	105.32
1931	94.45
1932	93.64
1933	92.58
1934	94.71
1935	97.86
1939	
1940	93.92
1941	78.5

Secondary Source: Lieberman, Sima (1995), *Growth and crisis in the Spanish economy*: *1940 - 1993*. London and New York: Rutledge; p. 18.
Primary Source: Carreras, A., 'La Producción Industrial Española, 1842-1981: Construcción de un Indice Annual', in *Revista de Historia Económica*, Nr. 1, 1984, pp. 127-57.

Table 3: Change in Spanish Gross Domestic Product (GDP) from 1959 – 1973

Year	**% Increase**
1959	-2.5
1960	0.2
1961	11.4
1962	10.3
1963	6.6
1964	6.1
1965	6.3
1966	8.5
1967	5.5
1968	6.5
1969	8.4
1970	5.9
1971	4.9
1972	8.4
1973	8.5

Source: Harrison, Joseph (1985), *The Spanish economy in the twentieth century*. New York: St. Martin's Press, p.144.

Table 4: Percent of Labor Force Unemployed in Spain, 1974- 2011

Year	% unemployed
1974	2.400
1975	3.500
1976	4.500
1977	5.200
1978	6.900
1979	8.600
1980	11.011
1981	13.755
1982	15.770
1983	17.215
1984	19.937
1985	21.305
1986	20.907
1987	20.223
1988	19.238
1989	17.240
1990	16.238
1991	16.313
1992	18.353
1993	22.640
1994	24.118
1995	22.900
1996	22.080
1997	20.610
1998	18.605
1999	15.640
2000	13.873
2001	10.553
2002	11.474
2003	11.480
2004	10.970
2005	9.160
2006	8.513
2007	8.263
2008	11.327
2009	18.010
2010	19.400*
2011	18.700*

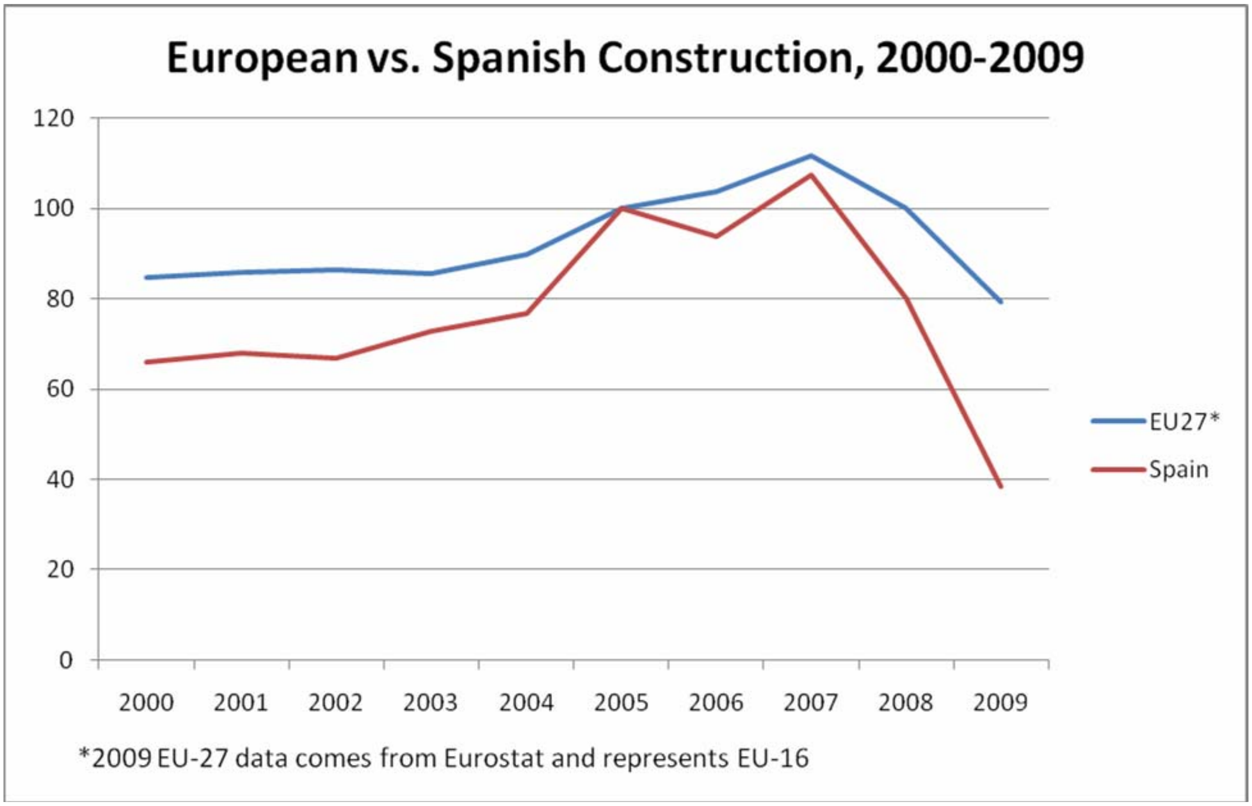
Source:

1974-1979 Organization for Economic Co-Operation and Development (OECD) Database, 1980-2011 The International Monetary Fund World Economic Outlook Database at:

http://www.imf.org/external/pubs/ft/weo/2010/01/weodata/weoselgr.aspx

***International Monetary Fund (IMF) staff estimates, last updated April 2010.**

Figure 2: Spanish Relative Construction in the 21st Century



Source: Instituto Nacional de Estadística (INE) at:

http://www.ine.es/jaxi/tabla.do?path=/t07/a081/e01/l1/&file=03002.px&type=pcaxis&L=1

and Eurostat at:

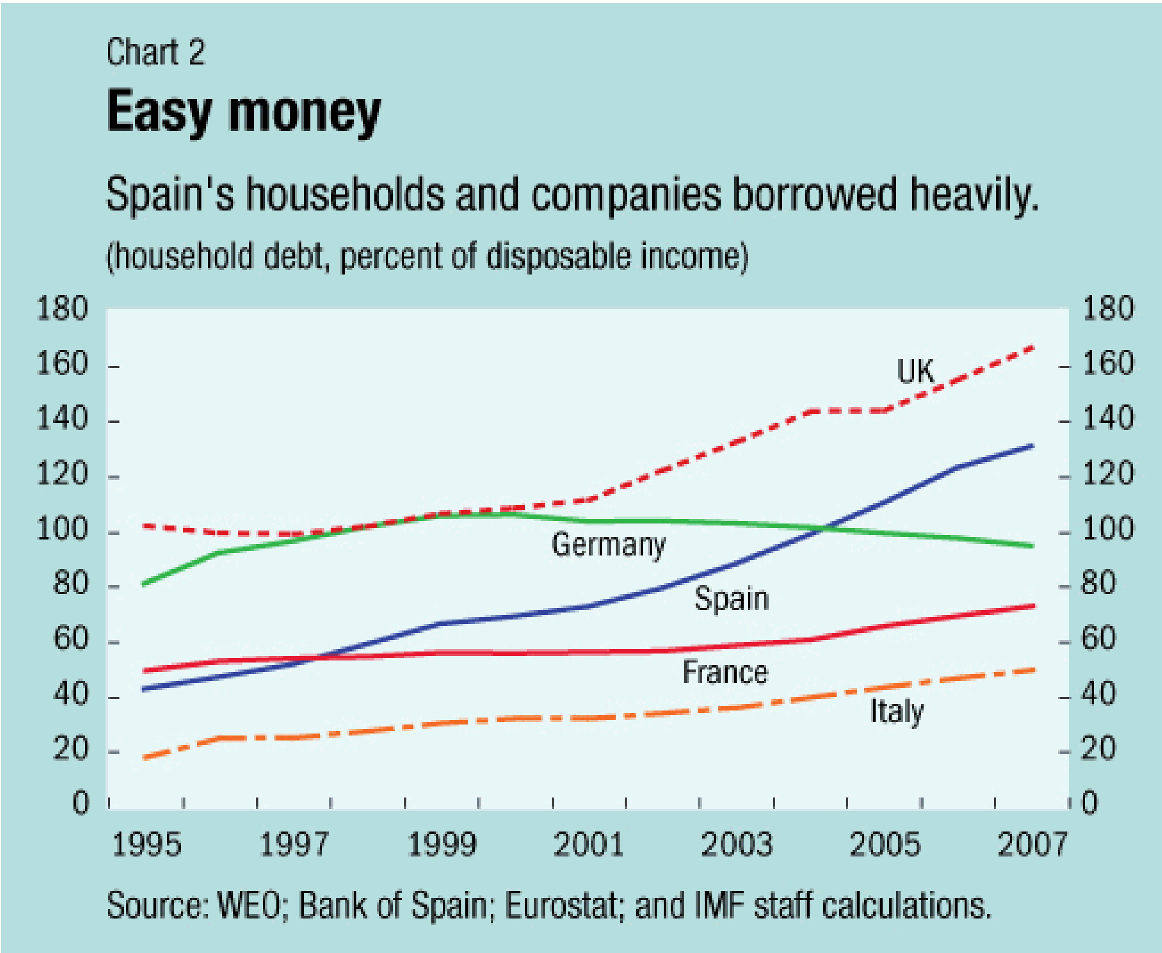
http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do

Figure 3: Spanish Subprime Market Plunge

Source: Yahoo! Finance at:

http://au.finance.yahoo.com/q/bc?s=^ESDOWD&t=my&l=on&z=l&q=l&c=

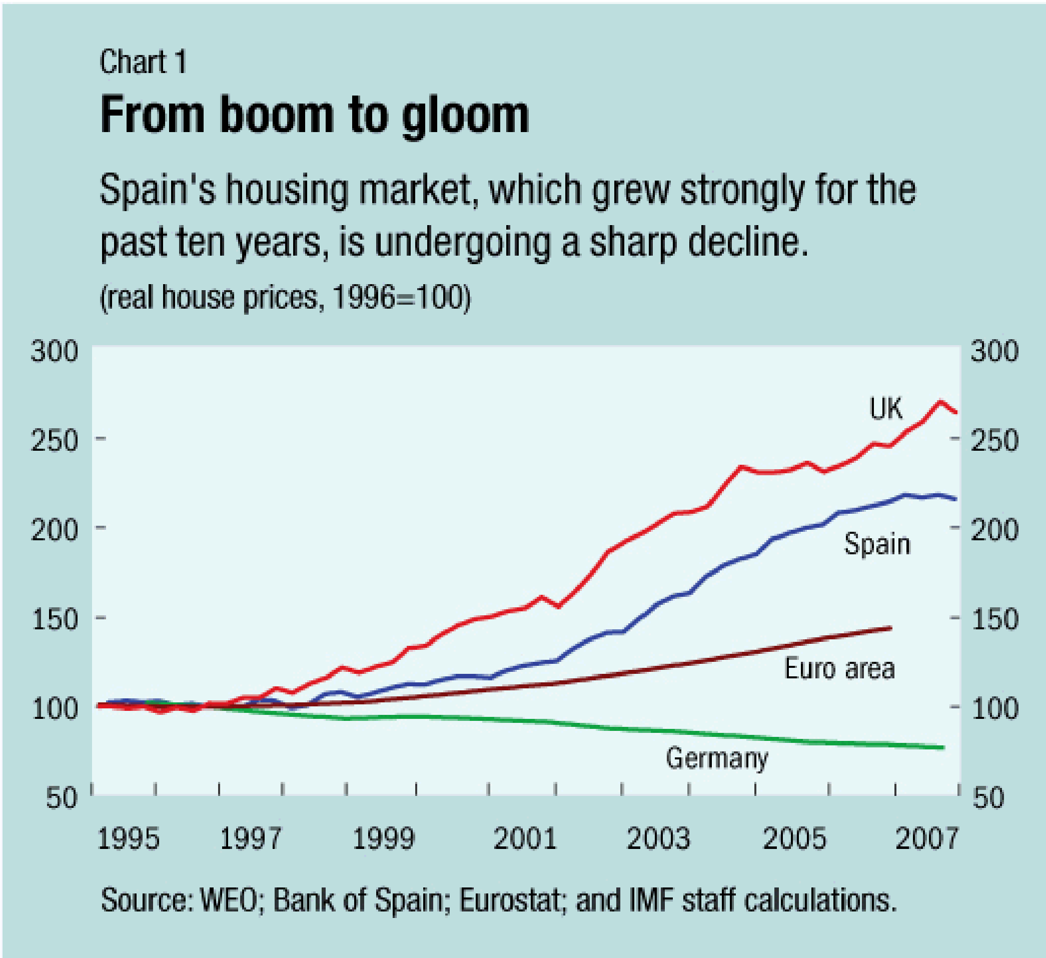
Figure 4: Spanish Borrowing 1995-2007



Source: IMF at:

http://www.imf.org/external/pubs/ft/survey/so/2009/CAR042409B.htm

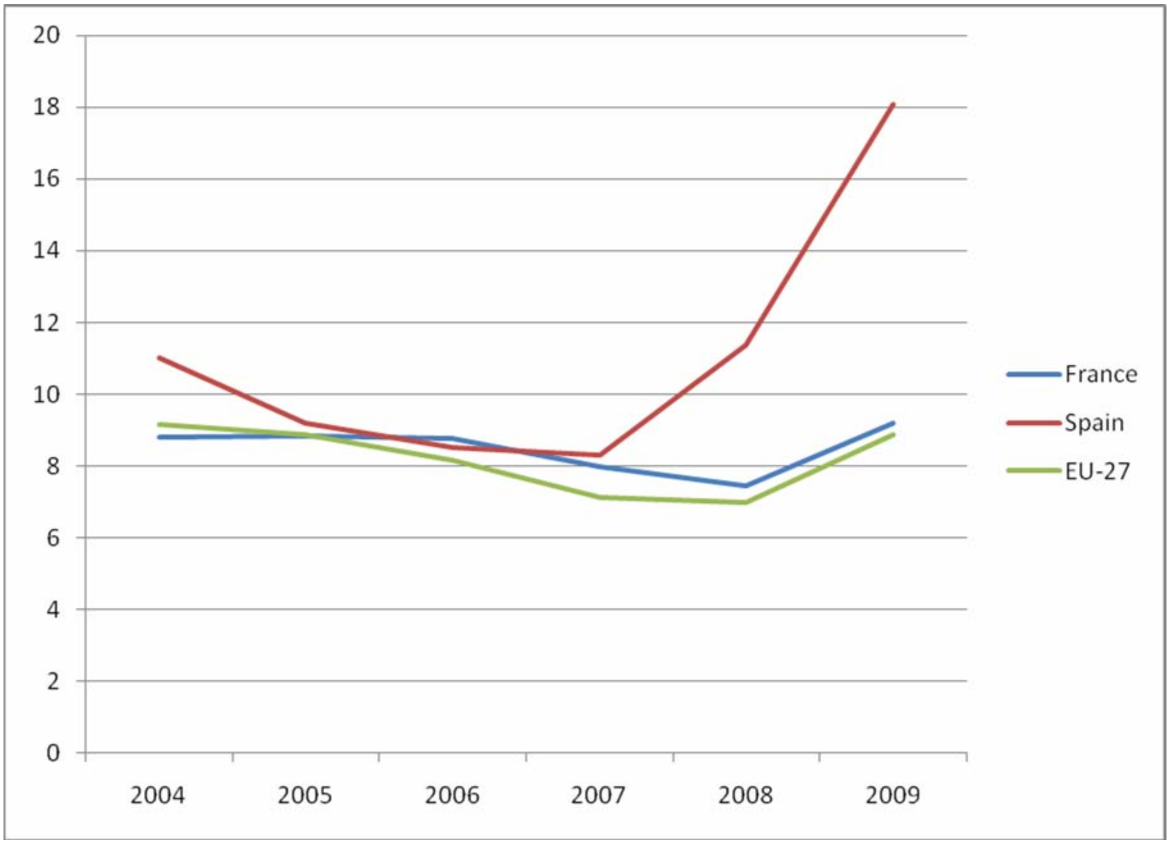
Figure 5: Spanish Housing Prices 1995-2007



Source: International Monetary Fund (IMF) at:

http://www.imf.org/external/pubs/ft/survey/so/2009/CAR042409B.htm

Figure 6: European Unemployment Rates



Source: Organization for Economic Co-Operation and Development (OECD) Labour Statistics (MEI) at:

http://stats.oecd.org/Index.aspx?DatasetCode=ALFS_SUMTAB