DISCUSSION PAPER SERIES

No. 7909

THE SPANISH CRISIS: BACKGROUND AND POLICY CHALLENGES

Javier Suarez

FINANCIAL ECONOMICS



Centre for Economic Policy Research

www.cepr.org

Available online at:

www.cepr.org/pubs/dps/DP7909.asp

THE SPANISH CRISIS: BACKGROUND AND POLICY CHALLENGES

Javier Suarez, Centre for Monetary and Financial Studies (CEMFI) and CEPR

Discussion Paper No. 7909 July 2010

Centre for Economic Policy Research 53–56 Gt Sutton St, London EC1V 0DG, UK Tel: (44 20) 7183 8801, Fax: (44 20) 7183 8820 Email: cepr@cepr.org, Website: www.cepr.org

This Discussion Paper is issued under the auspices of the Centre's research programme in **FINANCIAL ECONOMICS**. Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as an educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

Copyright: Javier Suarez

ABSTRACT

The Spanish Crisis: Background and Policy Challenges*

This paper reviews the background and key policy challenges of the current situation of the Spanish economy. It describes the strengths and weaknesses of Spain's recent long growth cycle, the real and financial imbalances accumulated towards its end, and the troubles faced at the current stage. Particular attention is paid to the developments in private and public sector finances and, specifically, to their implications for the banking sector. Attention is also paid to the political-economy background, especially in regards to the undertaking of structural reforms. It is argued that recent external pressure, partly initiated by unjustified catastrophic expectations about Spain, provides an opportunity for accelerating the reforms needed to resume strong growth.

JEL Classification: E66, G20 and O52

Keywords: economic crisis, Spain, Spanish banks and structural reforms

Javier Suarez CEMFI Casado del Alisal, 5 28014 Madrid SPAIN

Email: suarez@cemfi.es

For further Discussion Papers by this author see: www.cepr.org/pubs/new-dps/dplist.asp?authorid=126530

* I am very grateful to Roberto Ramos for his excellent research assistance and Samuel Bentolila and Rafael Repullo for their comments to an earlier draft of this paper.

Submitted 20 June 2010

Foreword

An Open Letter to International Investors

June 2010

Dear international investors,

I am writing to you this open letter in connection with your recent concerns about the state and future of the Spanish economy. I am writing in my quality as an academic who has had the privilege to follow many discussions among academics, policy makers, and private agents during the last few years.

Let me summarize the contents of what I develop in greater detail in the rest of this paper on <u>"The Spanish Crisis: Background and Policy Challenges"</u>:

The international financial crisis initiated in the Summer of 2007 marked the abrupt end of a long high growth cycle for Spain. The growth cycle was accompanied by a construction and real estate boom. Strong domestic demand contributed to produce a systematic and gradually increasing current account deficit which had an unavoidable counterpart in terms of increasing "indebtedness" with the rest of the world.

This indebtedness process was mainly a private sector phenomenon in which banks channeled funds from foreign savers to Spanish firms and households. To interpret the process, it is indispensable to take into account that many Spanish firms used external financing to become large, competitive and internationally diversified business groups. Most of our banks and non-financial corporations maintained reasonable levels of capitalization during the expansion process.

By 2004 Spain had become a much more fundamentally developed economy. But there was also a latent accumulation of imbalances: over-specialization in construction, sluggish productivity, declining competitiveness, a large fraction of workers on fixed-term contracts, and an unsustainable growth in real housing prices that fed the hope of many Spaniards to become rich in an easy manner.

Economists had identified the unhealthy parts of the process for years. But the authorities did not take sufficient corrective action. Attempted labor market reforms, for example, left the acquired rights of the permanent workers and the prerogatives of the trade unions basically untouched.

Monetary policy was no longer under our control. The so-called dynamic provisions of the Bank of Spain were a possibly failed attempt to slow down credit growth, although they gave banks a good buffer with which to absorb credit losses during the current crisis.

In theory, with monetary policy no longer under the control of Spanish authorities (and with negative real interest rates in part of the process), the restrictive role should have been played by fiscal policy. However, our fiscal discipline indicators looked pretty good in the boom years, which allowed

governments at all territorial levels to get involved in increasingly generous expenditure policies.

Of course, the accumulation of debt by the private sector has left banks exposed to losses, especially for exposures connected with real estate. But extrapolating the loss experience of US subprime products to Spain is unjustified, since the standards at origination were stricter, and all the originated debt remained in banks' books and was backed with sizable equity capital and provisions.

Current asset losses are heterogeneously distributed across asset classes and across banks. The two large commercial banks ("bancos"), BBVA and Santander, are much better protected against domestic asset losses thanks to their internationally diversification. Stress test calculations suggest that most banks have enough capital to absorb potential losses over at least a two-year horizon. Resuming job creation within that time interval will be key to fully rule out the prospect of a sustained deterioration of bank solvency

In the meantime, long-term viability for some banks may require that they merge with richer-in-capital or more efficient institutions or are recapitalized in some form. It will also be desirable for the whole system to get gradually rid of the real estate holdings that have been accumulated in cancellation of debts or out of foreclosures. This will accelerate the adjustment of the banking and real estate sectors to the new situation.

In my view, the key challenge for banks along the capital dimension, is not solvency per se, but having enough equity capital to finance the recovery. But the most pressing problem in the short term is liquidity. Given the net borrowing position accumulated by the national economy, continued access of our banks to wholesale market funding or central bank facilities will remain essential for a number of years.

The crisis has certainly frustrated the extrapolative expectations of many Spaniards who took our differential growth rate for granted, were happy to see the development of our welfare state, and felt reasonably satisfied and safe in the status quo. So far the adjustment to the crisis have occurred via quantities more than prices, many agents suffer debt overhangs, and massive redistribution is taking place as a result of the operation of welfare state provisions (e.g. unemployment benefits) and their implications for current and future government finances.

The crisis has reactivated the debate on structural reforms, increasingly perceived as the key to improve our growth potential and conjure away the possibility of a "lost decade". Proposed reforms touch on many aspects of the economy: the labor market, the education and pension systems, and the public, housing, and banking sectors. Complementary to the reforms, Spain may need something equivalent to an "internal devaluation".

The severity of the crisis has left the Spanish population and some of our leaders under state of shock. After an initial stage of incredulity, the situation starts being assimilated, and the next step is to actively attempt to overcome the difficulties. This will require political leadership and good technical guidance.

After overcoming the state of shock in which the crisis left many Spaniards and our politicians, there are noticeable signs of reaction. Households' savings rate has risen from less than 11% of disposable income in 2007 to 18% in 2009. The Spanish government, which started attributing a rather imported and temporary character to the crisis, has gradually changed the diagnosis. Now the severity of the situation is recognized and the policy response is under serious reconsideration.

Most of you, my dear international investors, have also woken up. However, the phantoms of what was seen in other places and historical times are possibly making you over-react. The biggest short-run threat to European stability does not come from the fundamental problems of Spain but from the possibility of succumbing to disaster prophecies with potential to self-fulfill.

European leaders seem committed to the continuity of the EMU in the short term. The policy recipe includes an accelerated cut of government deficits, the continued support of the ECB to the refinancing needs of European banks, and, if needed, some form of direct intervention in support of government debts subject to self-fulfilling undervaluation spirals.

Given the pre-existing resistance of groups of interest and politicians to adopt the structural reforms, I actually see recent financial turbulence (and the subsequent political developments) as an opportunity for Spain to accelerate the move in the right direction. Fortunately, the list of pending structural reforms is well defined.

The necessary adjustments are large and not free from short-run costs. But remaining a serious member of the club of well-behaving European partners carries strong value for most Spaniards. If asked for it, Spaniards will be willing to accept the necessary short-term sacrifices

If effort, entrepreneurship, professionalism, competence, and diligence get better rewarded and key aspects of the economy and our welfare state are redesigned in order to strike a better balance between insurance and incentives, generosity and sustainability, then the future of Spain will be bright.

I hope Spaniards and their political leaders will be able to take the right course of action, while you keep confident in our future. Thank you in advance for your support.

Sincerely yours,

Javier Suarez

Professor of Banking and Finance at CEMFI, Madrid Research Fellow at CEPR, London

1. Introduction

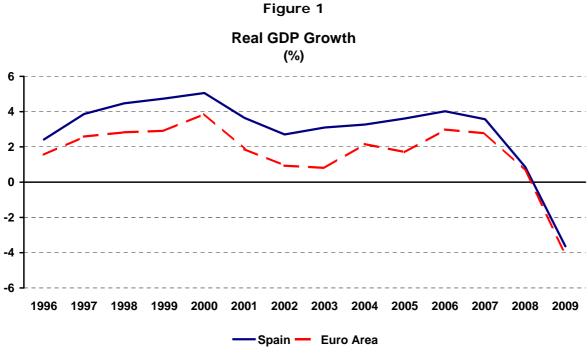
The Spanish annual real GDP growth rate was 3.6% in 2007, became 0.8% in 2008, and -3.6% in 2009. Our unemployment rate was of about 8% in 2007, rebounded up to 11% in 2008 and ended up 2009 at 18%. We will possibly finish this year with a GDP decline of around 50 basis points and an unemployment rate close to 20%.²

In this brief paper I review the background and key policy challenges of the current situation of the Spanish economy. I describe the strengths and weaknesses of the recent long growth cycle, the real and financial imbalances accumulated towards its end, and the troubles faced at the current stage. I pay particular attention to the developments in private and public sector finances and, specifically, to their implications for the banking sector.

I also discuss the political-economy background of the situation, especially in regards to the undertaking of structural reforms. I argue that recent external pressure, in spite of being partly initiated by unjustified catastrophic expectations about Spain, may actually provide an opportunity for accelerating the reforms needed for Spain to return to a strong growth path.

2. Abrupt end of a long growth cycle

The international financial crisis initiated in the Summer of 2007 marked the abrupt end of a long high growth cycle for Spain. This cycle started around 1996 and features several interrelated developments. Spain exhibited a yearly rate of real GDP growth between 1 and 1.5 percentage points higher than the Euro Area (EA) as a whole.



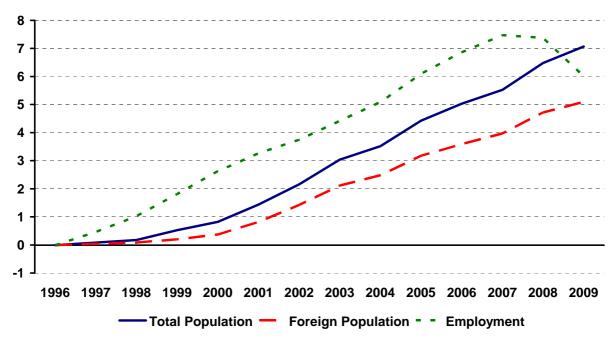
Source: International Monetary Fund

a. Population growth due to immigration

We also experienced high population growth (going from roughly 40 million inhabitants in 1996 to 47 million in 2010). Spain left behind its tradition as a country of emigrants (back to the 1950s and 1960s, when many left the country to work in other parts of Western Europe and in Latin America). It attracted more than 5 million immigrants since 1996. The presence of foreigners in the overall population went up from less than 2% in 1996 to more than 12% in 2009. Spain became a favorite destination for many North African (mostly from Morocco), Latin American (including Ecuador, Colombia, Argentina, Bolivia, and Peru), Easter European (mostly, Romania) and also, with a different profile and motivation, for a significant number of white-collar professionals and retirees from other countries in Western Europe (most notably, the UK, Germany, and France).

Figure 2

Population and Employment Growth
(Cumulative Change, Millions)



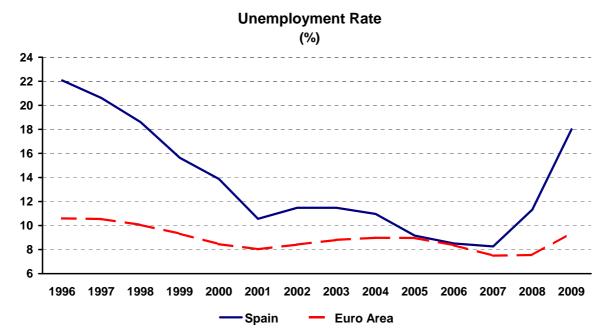
Source: Instituto Nacional de Estadística

b. High job creation

In parallel, many jobs were created: people employed went from roughly 13 million in 1996 to above 20 million in 2007. During this period, the local active population also grew, partly due to the incorporation of the late baby-boomers (born in the 1970s) and partly due to the gradual increase in female participation. Yet net job creation was strong enough to make the assimilation of immigrants compatible with a sustained decline in unemployment (from its historical highs of almost 25% in 1993 to 8% in 2007). Immigrants were

popularly perceived as occupying the jobs that (most) Spaniards "did not find attractive" for themselves.⁴

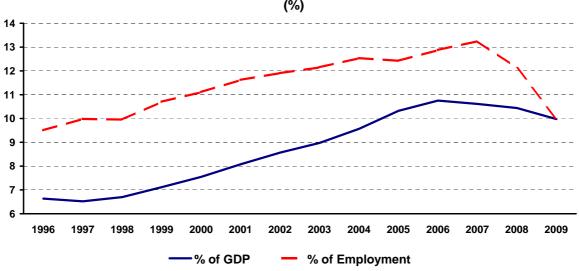
Figure 3



Source: Instituto Nacional de Estadística

c. Construction and real estate booms

Figure 4
Share of Construction in GDP and Employment



Source: Instituto Nacional de Estadística

This long growth cycle was accompanied by a construction and real estate boom. At the peak of the process, in 2006, Spain only was finishing as many

new dwellings (597,632 units) as the rest of the European Union altogether and three times the number finished in 1996 (194,871). Construction workers represented about 13% of employment and construction activities contributed about 10% of GDP, while the typical values of these shares prior to the boom (as well as in comparable countries without a housing boom) were more in the order of 10% and 7%, respectively. The boom was accompanied by an explosion in real housing prices.

Figure 5

Growth in Real Housing Prices
(%)

15
10
5
10
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

— Real Housing Prices (New, Free Market Dewllings)

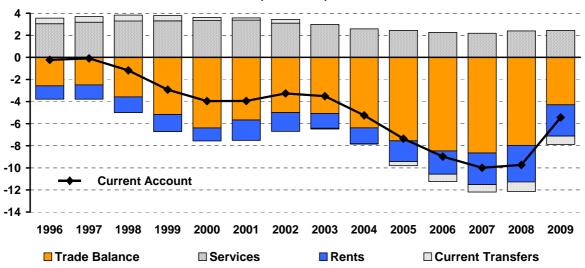
Source: Ministerio de Vivienda & Banco de España

d. High trade and current account deficits

The process went together with a sustained trade deficit, a structural feature of the Spanish economy that, traditionally, covered a good part of it with net revenue from services, most notably, tourism. In fact, during these years, tourism remained as the single most important industry in the country (representing about 11% of GDP and 11% of jobs in 2006) and made a nice positive *gross* contribution to current account balance (equivalent to 4% of GDP in 2007). However, strong domestic demand made our trade deficit to rise from 2.6% in 1996 to 8.7% in 2007 and, together with several other factors (including the greater tendency of Spanish residents to spend in tourism abroad, the increasing remittances of immigrants to their countries of origin, and the decline in net transfers received from the European Union) contributed to produce a systematic and gradually increasing current account deficit (up to a record level of 10% of GDP in 2007).

Figure 6

Current Account Balance and Its Components (% of GDP)



Source: Banco de España

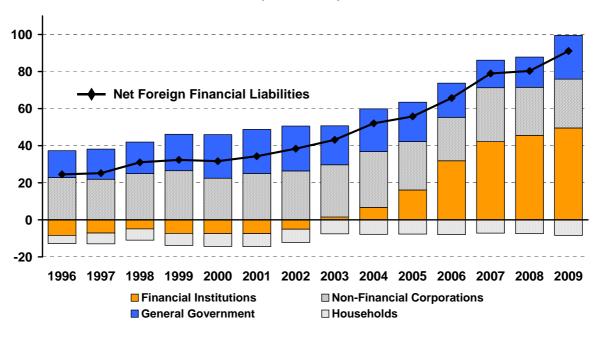
e. Increasing reliance of the private sector on external financing

Of course, the described process has an unavoidable counterpart in terms of an increasing reliance of the domestic economy on financing coming from the rest of the world. In the good years, this increasing "indebtedness" process was more a private sector than a public sector phenomenon. Government deficit as a fraction of GDP was generally lower than the rate of GDP growth, implying that government debt went down from 67% of GDP in 1996 to 36% in 2007. Indeed, as paradoxically as it now seems, in 2005 the Spanish government proudly celebrated reaching a surplus for the first time in 30 years.

To a first approximation, the increase in the ratio of Spanish "net financial liabilities" vis-à-vis the rest of the world during the boom (from 24% of GDP in 1996 to 78% in 2007) is explained as the result of the net financing needs of non-financial corporations (largely satisfied with bank loans) and a weaker contribution from the net financing capacity of households (which heavily accumulated mortgage debt). However, the largest negative position in net foreign assets is accumulated by the banking sector (included as "Other monetary financial institutions" in the "Financial institutions" sector of the National Accounts). During the boom, banks used inter-bank markets, commercial paper, covered bonds, and other long term debt instruments to channel funds from foreign savers to Spanish firms and households.

Figure 7

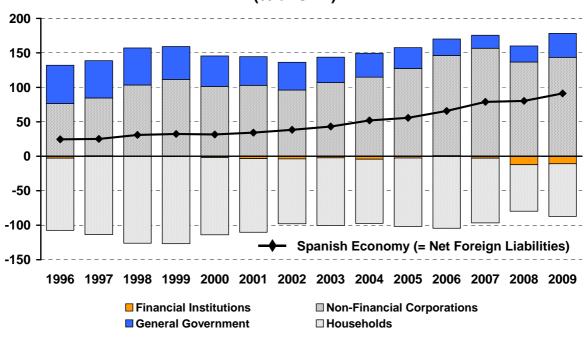
Net Foreign Financial Liabilities by Sector (% of GDP)



Source: Banco de España

Figure 8

Net Financial Liabilities by Sector (% of GDP)



Source: Banco de España

f. Emergence of an internationalized corporate sector...

To interpret the process, it is indispensable to take into account not only the already mentioned developments in population (which explain the financing needs linked to home purchases) but also the success story of many Spanish financial and non-financial corporations. Companies such as BBVA and Santander in banking, Repsol in energy, ACS and Ferrovial in civil engineering, Indra in information technology, Movistar in tele-communications, and Inditex (owner of the Zara brand name) in textiles, turned into relevant international business groups during these years. The accumulation of financial liabilities by the holding and parent companies of these large groups, domiciled in Spain, runs in parallel to their accumulation of valuable real and financial assets in Spain and the rest of the world, and explains a significant (and welcome!) part of the overall gross financial liabilities of the domestic private sector.

g. ... dependent on international funding but reasonably capitalized

Importantly, the "financial liabilities" of a given sector, as measured in the National Accounts, include both debt-like and equity-like liabilities. Each of these liability classes have very different implications for the financial solvency and resiliency of the agents that are part of such sector. In the case of the Spanish banking sector and the non-financial corporate sector, equity financing (including the part owned by international investors) accounts for a significant part of what is commonly considered part of the country's gross "indebtedness". Excluding equity-like liabilities so as to calculate the ratio of "net debt liabilities" to total financial assets for these sectors produces a more tranquilizing picture. Despite the deterioration suffered in the last few years, the end-of-2009 ratios of about 0.90 for banks and 1.01 for non-financial corporations are compatible with having maintained reasonable levels of capitalization.⁵

0,95 0,90 0,85 0,75 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 — Total — Short-Term

Figure 9

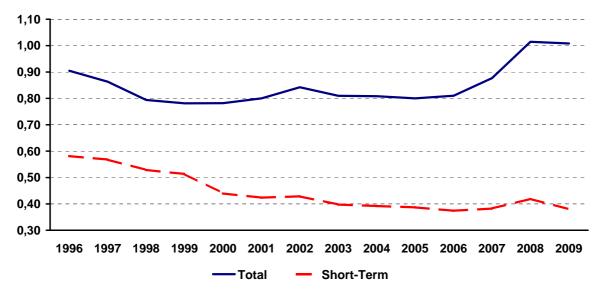
Banks:
Debt Liabilities over Financial Assets

Source: Banco de España

Figure 10

Non-Financial Corporations:

Debt Liabilities over Financial Assets



Source: Banco de España

h. Apparent success

Up to at least 2004, the balance of the process just described is a story of apparent success: improvements in physical infrastructures (out of public investment in highways, an ambitious plan to cover the country with a high speed railway network, and the establishment of good public transportation networks in major towns), a rebalancing of demographics (thanks to immigration), a general imprint of modernization in private and public buildings, installations, and equipments, solid social infrastructures (a developed educational system, one of the best health systems in Europe, a reasonably working, though generally slow, judiciary system, and consolidated democratic political institutions), a much more open economy, a technologically developed and internationally competitive financial system, and many expanding but reasonably well-capitalized financial and non-financial firms, including several large internationally-oriented business groups.

3. Accumulated imbalances

By 2004, however, there were also several signs that identified a latent accumulation of imbalances: ⁶ the previously mentioned over-specialization in residential construction, a disappointing performance of productivity (both in absolute terms and when compared to European partners), a cumulative loss of competitiveness (due to rising wages and a sustained inflation differential relative to the Euro Area average of about 1 percentage point per year), a high proportion (around 30%) of employees working under low-firing-costs fixed-term contracts, ⁷ and, above all, an unsustainable growth in real housing prices

(recall Figure 5) that, improperly extrapolated, fed the hope of many middle-aged Spaniards to become "rich" in an easy manner.⁸

Productivity and Competitiveness (Index: 1996=100)

115
110
105
100
95
90
11996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

— TFP Index — -Unit Labour Costs Relative to EU27 - - - Total Costs Relative to EU27

Figure 11

Source: EU KLEMS & Banco de España

a. Awareness and policy inaction

Authorities were somewhat aware of the unhealthy parts of the process. Regular reports and occasional papers from the staff of the Bank of Spain and many other good economists had identified these parts for years. Whether awareness led to corrective policy action is more doubtful. The labor market, for instance, was subject to several legislative changes and policy interventions that created a complex set of contractual varieties, social security treatments and (fiscally costly, but not necessarily effective) passive and active labor market policies. Most reforms were either opposed by the trade unions or taken by them as an opportunity to negotiate wage increases and to reassure the "acquired rights" of the permanent and/or government sector workers (their main constituencies), if not to increase the prerogatives and subsidies directly enjoyed by their organizations (including the management of a large fraction of the training programs for the unemployed). 10

b. Bank provisioning rules

Regarding the developments in housing prices and the construction sector, little was done to control the excesses. To be sure, some of the nowadays praised as exemplary regulatory and supervisory practices of the Bank of Spain, and more specifically, the introduction of the so-called "dynamic provisions", can be seen as an early attempt to respond to the credit side of the housing boom.¹¹ This attempt was only partly successful: on the one hand, it did not stop the boom (although it is hard to guess the counterfactual); on the other, it gave Spanish

banks a good buffer with which to absorb credit losses without eroding their capital bases (as defined by capital adequacy regulations).

c. Monetary policy

Monetary policy could have been a more effective tool to fight the real estate bubble (especially because the short-term real interest rate was actually negative for quite some time in this period) but it was no longer under the control of Spanish authorities. In fact, the asymmetric evolution of inflation, nominal wages, real interest rates, credit, real estate prices, etc. across the EA did not provide a clear cut case for the European Central Bank (ECB) to tighten its policy. Credit, for example, was growing fast by historical standards in countries such as Spain, Ireland or even the Netherlands, but exhibited rather moderate growth in France, Germany, and Italy. With hindsight, the fact that Spain "enjoyed" low or even negative real interest rates for a good part of its expansion period might now be considered inadequate from a "macroprudential" perspective.

Real Interest Rate
(1y Euribor - Inflation Rate, %)

4
3
2
1
0
-1
-2
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

—Real Interest Rate

Figure 12

Source: Banco de España & Instituto Nacional de Estadística

d. Fiscal policy

Fiscal policy was, in theory, a possible tool for the control of asymmetric developments in the context of the European Monetary Union (EMU). In Spain, however, government finances looked in pretty good shape during the good years. Despite our politicians frequently described the process as one of convergence to a genuine European-style "welfare state", the fiscal consolidation effort prior to the start up of the EMU and our sustained growth allowed government deficit to be gradually reduced during the boom. By 2007, government expenditures and revenues represented significantly lower fractions

of GDP in Spain (39% and 41%, respectively) than in most of its European neighbors (e.g. 45% and 46%, respectively, in the EU15 aggregate).

Government Balance (% of GDP) 52 50 48 46 44 42 40 38 36 34 2007 2008 2009 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 Spain: Revenue -EU15: Revenue Spain: Expenditure **-**EU15: Expenditure

Figure 13

Source: Eurostat

4. The fiscal nightmare

The fiscal numbers of the good years, however, even after conventional adjustments for the supposedly cyclical component, possibly masked a darker reality: a structural deficit that could have only be uncovered after discounting the fiscal implications of the construction and real estate booms. ¹² In addition to several sources of government revenue directly related to construction and real estate, the incomes indirectly generated as a result of the vitality of construction, the strength of job creation, the artificially low unemployment rate, the apparent rise in household wealth due to the increase in real estate prices, and the parallel consumption boom did most likely contribute to yield an over-optimistic picture of government finances. In parallel, the large immigration wave contributed to postpone the challenge to the social security balance posed by the aging process. ¹³

a. Not Greece?

Spain during its long recent expansion period is not Greece since it does not systematically manipulate the government accounts to hide its fiscal deficit and does not intentionally create hidden government liabilities. ¹⁴ Arguably, however, Spain exhibits a performance in terms of conventional fiscal discipline indicators that allow governments at all territorial levels (central, regional and local) to get involved in increasingly "generous" (and perhaps sometimes "reckless") policies. These policies are widely seen with sympathy by a majority of voters who

perceive them as fair and worth paying, especially under the income and wealth expectations of the good years.

b. Welfare state mentality

In fact, the developments were consistent with (and possibly contributed to reinforce) a culture of enjoying life and expecting support from others in times of hardship. During the 20th century, the traditional supporting roles of the family and charitable institutions such as the Catholic Church had been gradually assumed by the State. Political speeches in Spain frequently describe the State as a tool that should be used to promote social justice by redistributing a "societal pie" whose size is implicitly taken as given. Public policies and programs that target a mere "outcomes equalization" contents are commonly adopted with more enthusiasm than those promoting genuine equal opportunities, competition and meritocracy.

c. Subsidized incumbents

An extended feeling now prevails that entire industries, some groups of professionals, trade unions, employer organizations, and several other organized minorities, as well as many individuals and corporations of all sorts, have organized their economic lives, one way or another, around public sector concessions and subsidies. Many of us suspect that there are deep connections between this fact and phenomena such as the poor performance of the Spanish economy in terms of TFP growth, the still low employment rate among some groups of the population, the large number of days of work lost because of medical leave, and the resistance to move geographically or occupationally, over time and even across generations.

d. Unsustainable pension system

Similarly, many Spaniards resist to believe (partly because their politicians resist to tell them the naked truth) that, as in most other European countries, their highly intergenerationally redistributive pension system will be unsustainable unless some major adjustments are introduced rather early.¹⁵

e. Not just Spain

By objective international standards, though, the welfare state is smaller in Spain than in most other Western European countries (e.g., the number of state pensions of any class in 2007 was 21 per 100 habitants in Spain, 26 in the UK, 28 in France, and 33 in Germany). Demographics apart, our late catching up with economic development and democratic institutions implied that, when the crisis started, our social protection systems were still attempting to converge to the standards of our northern neighbors. Making welfare state provisions compatible with globalization, individual incentives, productivity growth, and the aging population, is very much a challenge for the entire Europe.

5. Territorial dimension of the fiscal problems

During the boom years, Spain continued its process of decentralization of government. The activity of the State over the territory is essentially divided in three layers: the central government ("Estado" or "Administración Central"), the regional government ("Comunidad Autónoma"), and the local government ("Ayuntamiento"). The last two manage the bulk of government expenses (including those in education, health and local public works) and define or execute many social policies and the activities of tons of regional and local agencies (covering from weather forecasting and foreign trade promotion to regionalized anti-trust, safety, environmental, and commercial policies and regulations).

a. Limited fiscal federalism

The extent of fiscal federalism in Spain is, however, limited. Only a few taxes are under the entire discretion of regional and local authorities. ¹⁶ These authorities typically receive (fixed or somehow adjustable) shares in the main revenue-raising tax figures (including VAT and personal and corporate income taxes), as well as some complementary transfers from the central government. A couple of regions have a higher level of fiscal autonomy and raise the main tax revenues by themselves, negotiating with the central government a contribution to the general budget that supposedly compensates for the cost of centrally provided services and contributes to inter-regional redistribution.

b. A complex center-periphery game...

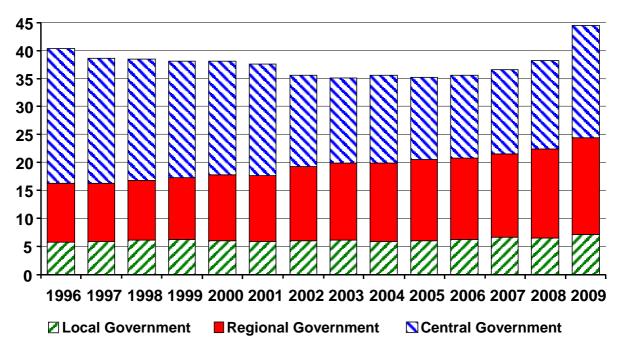
Roughly speaking, regional and, to a lower extent, local governments are the key "expense centers" in the political-economy game played by the various levels of government, while the central government is the key "revenue raising" (or, if needed, "borrowing") center that provides the necessary financing for all players. The objectives pursued by the central government in this game presumably include (i) guaranteeing some minimal standards of quality for the services provided to citizens throughout the country, (ii) preventing the accumulation of regional real or financial imbalances, and (iii) guaranteeing itself sufficient political support in the national parliament.

c. ... with a fiscally expansionary bias

In a context where the big national parties—either the Socialist Party (PSOE) or the Popular Party (PP)—only win the general elections with absolute majority in about one out of three occasions, the solution to the political-economy game described above tends to involve the recurrent topping up (with additional transfers) of the overall increase in expense incurred at other levels of government in a rather uncoordinated manner. Up to the end of the boom, this dynamics resulted in a clear upward drift in the expenditure share of regional and local governments and a downward trend in the share of the central government. Lately, the second trend was reversed by the rise in unemployment benefits and the fiscal stimulus measures made against the central government budget.

Figure 14

Expenditure by Government Level
(% of GDP)



Source: Eurostat

6. Concerns on banks

The accumulation of bank debt by the corporate and household sectors during the boom has left the Spanish banking sector exposed to what some analysts describe as Spain's "own subprime problem." However, virtually all the originated debt remained in banks books and, following the requirements of Bank of Spain, was backed with sizable equity capital and provisions. The standards at origination were generally strict, which means that default rates and severity conditional on default will be much less severe than in the US subprime mortgage market. Undue extrapolations are unjustified.

a. Impaired assets are growing but not all banks are equal

Of course, some of the loans to land developers and some of the mortgages, especially those granted in the last part of the boom, are causing losses. The evolution of the ratio of total impaired assets to total assets for deposit institutions reveals an acute problem (it reached 5.5% in March 2010) but still less acute than that seen in prior Spanish recessions. The problem is heterogeneously distributed across classes of assets (e.g. loans to land developers had an impairment ratio of 10% in March 2010). There are also important differences across banks, largely due to the different composition of their asset portfolios. Some differences apply across the segments of commercial banks ("bancos") and savings banks ("cajas"). The first segment includes two large players, BBVA and Santander, which thanks to the internationally diversification of their core banking activities, are much better protected against domestic asset losses.

b. Dealing with asset losses

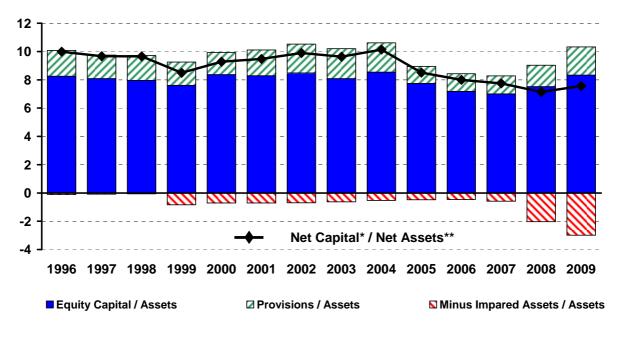
Most banks have adopted strategies that have the effect of smoothing the recognition (and perhaps the final realization) of asset losses. The most noticeable one is to acquire assets (e.g. real estate) from their borrowers in other to allow them to cancel their debts prior to default and possible foreclosure. Many of these assets, as well as assets obtained from foreclosures, are accumulated in bank books, waiting for a better time to sell them. Some analysts consider that this process may undesirably delay the unavoidable adjustment in real estate prices and create a problem of "zombie banks". Increasingly severe provisioning schemes have been put in place in order to discourage the process or, if not, at least take advanced care of the potential future losses.

c. Solvency concerns

Bank of Spain has a reputation for applying strict accounting standards and intervening banks whose net worth becomes insufficient to meet capital standards. So far interventions have affected two small savings banks. Stress test calculations suggest that even large potential losses on the assets owned by banks at the moment could be generally absorbed, over at least a two-year horizon, by the available capital and provisions, except at specific institutions. In any case, longer-term solvency concerns will not be over until the Spanish economy resumes steady growth and net job creation becomes positive again.

Figure 15

Banks' Capital Position
(%)



^{*} Net Capital = Equity Capital + Provisions - Impaired Assets, ** Net Assets = Assets - Impaired Assets

Source: Banco de España

d. Recapitalizing viable institutions

For some institutions, viability free from supervisory intervention may require merging with a richer-in-capital institution, recapitalizing or a mixture of these two approaches. The so-called *Fund for Orderly Bank Restructuring* (FROB) is a temporary arrangement put in place with the purpose of encouraging this type of restructurings. It offers public provision of convertible preferred stock funding to institutions involved in merging processes. Apparently the approaching deadline for access to current FROB facilities (June 30, 2010), supervisory pressure, and the possibility of taking advantage of scale economies (given their prior fragmentation) have motivated a significant number of savings banks to finalize merging plans in the last minute.

e. Liquidity problems

For the bulk of solvent Spanish banks, the main problem faced in the short to medium term is satisfying refinancing needs in a context of revived wholesale market turbulence. Most banks are fiercely competing for retail deposits in the domestic market but, given the net borrowing position accumulated by the national economy, the aggregate resources obtainable in this way will not be sufficient to cover the aggregate needs. Continued access to wholesale market funding at reasonable conditions or, otherwise, alternative funding from central bank facilities will remain essential for a number of years.

f. Lending capacity problems

Simultaneously, Spanish banks are trying to keep or improve their (regulatory and economic) capital position in a variety of ways: some banks have issued equity, most have moderated their payout policies, and possibly all of them have tightened their credit standards and shifted their investment policies towards assets with a lower regulatory risk weight. The net impact so far suggests that the latter are the winning forces and the result is a severe credit crunch, especially for private sector credit. At the aggregate level, credit to the general government (via the acquisition of government debt) is the only broad category of bank credit that exhibits a significantly positive growth rate by March 2010. From my point of view, the key challenge along the capital dimension is not solvency per se, but whether Spanish banks will have enough equity capital to finance the natural recovery of the private sector or will otherwise slow down the whole recovery process.

7. Spaniards' economic prospects in the boom

During the good years, many middle-aged Spaniards (and, at a lower extent, some of our immigrant co-citizens) had extrapolative expectations about Spain's sustained differential growth. They attributed it largely to a "miracle" and took it for granted. They could expect their monthly salaries (or a least the value of their properties or the properties that they would inherit from their parents) to keep growing almost by magic and, hence, they could get into buying expensive vacation packages and cars, and first and second residences,... and even garages or other residential or commercial estates in the hope of getting an easy future life out of their rents and revaluation.

a. Not all created equal

Meanwhile, young or not so young workers of Spanish origin who entered the labor market in the last part of the good years complained about the 1000 (or less) euro monthly wage of their fixed-term jobs, the outrageous cost of housing, and the prospect of spending quite some time (about 5 years on average) on a sequence of fixed-term contracts. Yet the median fixed-term worker still dreamed about finally getting a permanent job (if possible as a "funcionario" in the government sector), buying a flat, and enjoying a growing yearly wage at some point in their life... typically at a quite late age by international standards.²⁰

b. Supporters of the status quo

Thus, either on a factual or an expectational basis, many groups of interest (including some permanent workers, many public sector workers, local governments, trade unions, firms in the most benefited industries and even banks) felt reasonably satisfied and safe in the status quo previous to the crisis, and provided their implicit support to persevering in the many imperfections of the system. Only at a late stage, the general opinion has perceived that our economic system offered the largest "benefits" of the long expansion period to agents such as the real estate owners and developers, the corrupt local politicians, and other rent seekers all around the economy. Citizens seem finally conscious of the bad consequences of having allowed so many people to get an easy way of life without much talent, training, diligence or hard work.

8. Overcoming the crisis

Only at this stage it seems obvious that the Spanish society paid a cost in terms of missing its opportunity to have a more solid growth process, based on productivity growth, on more creativity-intensive, talent-intensive or technologically-intensive activities, and higher human capital development.

a. Unsustainable quantity-based and deficit-based adjustment

The crisis has frustrated many of the expectations formed during the good years. So far the adjustment in the economy has taken the form of massive job destruction and subsequent unemployment, the freeze of bank credit to the private sector, an unprecedented jump in household savings, a drastic fall in private investment, a sudden drop in government revenue, unsustainable increase in government expenditure. The adjustment has occurred via quantities more than prices. Many workers have no jobs and many houses have no use, and remain as part of banks' growing portfolio of "empty" residential real estate portfolios. Many agents (including households, firms, banks, municipalities, etc.) suffer debt overhangs. Meanwhile, standard welfare state provisions and various discretionary measures (such as the extension of unemployment benefits) imply lots of redistribution between and within the private and the public sectors. Statically, the main manifestation of such redistribution is the worrying level of the government budget deficit. From a more dynamic perspective, unless growth strongly resumes, the process will entail radical expense cuts, much heavier taxes or a mixture of both.

b. What then?

Given the accumulated imbalances, the quickest way to achieve part of the necessary adjustment might be to undertake an "internal devaluation", i.e. wage and price cuts (especially in tradable goods) so as produce a rapid recovery of the lost competitiveness. Whether such process takes place or not, the economy also needs the execution of an ambitious program of "structural reforms" aimed to repair the imperfect aspects of the system and to boost its long-term growth potential.

c. Structural reforms

In the political-economy environment of the good years, governments successively missed opportunities to undertake the list of structural reforms long-ago identified by many Spanish economists. Not surprisingly, the crisis has reactivated the debate on the need for many old and some new structural reforms. The non-exhaustive list of them (in logical order, without implying priority) includes the following: ²³

Education system

- 1) Reorienting the whole education and economic system to more clearly reward educational attainment and the search of excellence at all levels, from pre-primary schools to vocational and university studies.²⁴
- 2) Improving the contents and quality of secondary education, which scores poorly in terms of student performance and is generally perceived as inadequate to successfully compete in the globalized economy. The need to improve attainment levels (in 2008 the fraction of the population aged 20-24 with at least upper secondary education was above 78% in the overall European Union but only 60% in Spain) must be made compatible with improving the qualification of those starting university studies and allowing a sufficient fraction of the best talent to end up devoted to research and innovation.

Labor market

- 3) Eliminating the duality manifested in the coexistence between fixed-term-contract workers and permanent-contract workers.²⁵ The current system under-protects the first and over-protects the second, biases firing and training decisions by employers, damages workers' incentives to accumulate human capital, and contributes to wage rigidity under a collective bargaining process dominated by permanent-contract workers.
- 4) Increasing the flexibility of wage setting and other aspects of the collective bargaining process, whose current design favors inertia in wage and non-wage conditions and is too centralized to accommodate firms specificities, and too decentralized to favor coordinated adjustment to macroeconomic conditions.²⁶

Pension system

5) Adapting the pension system to the incoming demographic challenges. A quick recognition of the need to postpone retirement, to revise the formulas determining the entitlements, and to contain the amount of intergenerational redistribution will help guarantee the financial and political sustainability of the system.²⁷

Public sector

- 6) Rationalizing the government sector and, specifically, its territorial decentralization, in order to correct the perverse incentives associated with the current financing of regional and local governments, remove redundancies, dampen the incentives to overspend, and eliminate the obstacles to the existence of a truly single internal market.
- 7) Revising public programs and the full set of existing public prices (mainly in health and non-compulsory education) and tax benefits (in all areas) to improve the incentive compatibility and cost-effectiveness of their explicit and implicit subsidization schemes (even when their purpose were mainly redistributive).

Housing sector

8) Revising regulations, fiscal incentives, and public policies regarding the housing sector so as to remove undue distortions in favor of home ownership, increase the depth of the rental market, improve geographical labor mobility, reduce the chances of resuscitating unsustainable price dynamics and an oversized construction sector, and maintaining an undesirable collusion between the interests of local authorities, corruptible officials, land developers, construction companies, and the banking sector.²⁸

Banking sector

9) Restructuring the banking sector and, specifically, its savings banks segment, so as to remove any doubts on its solvency and restore the efficacy of its financial intermediation function. Political interference in the management of savings banks needs to be reduced. Additionally, savings banks must be able to raise equity capital in the market, reduce inefficient levels of fragmentation, and have the option to convert into (or be sold to) commercial banks as part of their restructuring process.

9. Views after the trauma

The course of events over the past months and weeks left the Spanish population and some of our political and social leaders under state of shock, in transition from the initial incredulity with which human beings tend to receive the worst news to that state of rebellion in which one asks "why me" and looks for outside causes to blame for the situation. As in the psychology of trauma, the next step is either to assimilate the situation and to actively attempt to

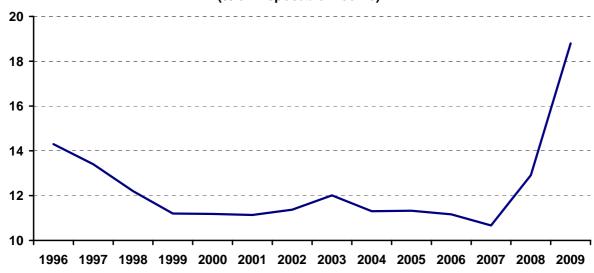
overcome the difficulties of the new reality or to fall into depression and make things even worse.

a. The citizens

It is early to say which way will be chosen by the majority, but there are noticeable signs of reaction. Households' savings rate has risen from less than 11% of disposable income in 2007 to 18% in 2009. The popularity of Spanish politicians is at historical minima. And very few believe by now that Spanish problems are the mere consequence of the international financial and economic crisis.

Figure 16

Households Savings Rate
(% of Disposable Income)



Source: Instituto Nacional de Estadística

b. The government

The Spanish government started attributing a rather imported and temporary character to the crisis. Gradually, the diagnosis changed to recognizing the specific difficulties stemming from the overspecialization in residential construction but economic policy continued guided by the idea that fiscal stimulus, sticking to generous "social policies", and waiting for the rest of the world to recover would be enough to bring the economy back into its "normal" growth path. Gladly, this strategy is now under serious reconsideration.

c. The external analysts

Most external analysts (including the main official international organizations following the Spanish economy) were much more skeptical. They advised about the possibility of achieving just a slow, fragile, and potentially fiscally explosive recovery under this approach; something potentially conducive to a Japanese-

style "lost decade". Consensus has gradually moved towards recommending fiscal consolidation and structural reforms as the key strategy to conjure away such possibility.²⁹

d. The international investors

At the current stage, most international investors have also woken up. After so heavily contributing to finance the Spanish boom, they no longer manage the same extrapolative expectations as my co-citizens in the good years. Like Spaniards, they have become increasingly aware of the problems of the Spanish economy. And their worries are partly reasonable.

10. A European problem

To be sure, the debacle of Iceland, the government-debt crisis in Greece, and the phantoms of what was seen in other latitudes and historical times are possibly making you over-react. Doubts on the sustainability of Spanish public finances have been mentioned as a serious threat to global financial stability and to the sustainability of the EMU. In my opinion, however, the biggest threat to European stability in the short run does not come from the fundamental problems of Spain or any other single economy in Europe but from the possibility of succumbing to "disaster prophecies" with potential to self-fulfill.

a. Is Europe committed to EMU?

European leaders have been forced to improvise extraordinary measures, first, in support of the government debts subject to speculation (and, thereby, in support of the sustainability of the EMU) and, then, in the form of drastic fiscal consolidation plans in all countries. This process reveals two realities:

- 1) European leaders are committed to the continuity of the EMU in the short term and, thus, willing to pay significant costs (in terms of their own popularity, the credibility of the ECB, and some present or future taxpayer money and, perhaps, inflation) to restore confidence.³⁰
- 2) The lack of a single fiscal policy or, otherwise, credible arrangements that prevent the accumulation of cross-country imbalances or allow their reabsorption at the EMU level in times of crisis is a systemic vulnerability that will require a deeper long-term response.³¹

The response to the second of the challenges is necessarily constitutional and equivalent to refunding EMU on a stronger basis. If this constitutional response were politically unfeasible (or considered inadequate by the core members of the EMU), then the orderly dissolution of the current monetary union would indeed be the most consistent alternative. Meanwhile, the policy recipe includes an accelerated cut of government deficits, the continued support of the ECB to the refinancing needs of European banks, and, if needed, some form of direct intervention in support of government debts subject to self-fulfilling undervaluation spirals.

b. Is Spain committed to EMU?

Coming back to the specificities of Spain and assuming the phantom of a disaster scenario is conjured away, my expectation is that Spain will certainly recover and remain solvent. Remaining a serious member of the club of well-behaving European partners carries strong value for most Spaniards and most of their politicians. Belonging to the "core" of Europe is considered one of the largest collective achievements of the Spanish society since its transition to democracy. Polls consistently show strong support for our membership of the European institutions, which is perceived as a source of long-term benefits. The implication of this is that, if asked for it, Spaniards will be willing to accept sacrifices in the short-term in order to maintain Spain's status as a well-behaving partner in the EMU.

c. The rest of Europe also needs structural reforms

In many respects, though, Spain is not so special. Some of the economic and political rigidities and inertias identified in previous sections may well apply, with their own specificities, to other members of the European Union. Ensuring that Europe remains competitive in the global economy will require to properly address, sooner rather than later, the challenges associated with the process of aging, with the reform of the welfare state, and with need to boost technological progress, human capital development, and entrepreneurship as the ultimate engines of economic growth.

11. An opportunity for Spain

Given the pre-existing resistance of groups of interest and politicians to adopt the type of structural reforms mentioned above, recent turbulence in financial markets, the coordinated move towards greater fiscal discipline in all Europe, and the focus on the additional measures that Spain (among other countries) may adopt to resume solid growth can actually provide an opportunity to accelerate the political move in the right direction.

a. Need for leadership

The current process requires political leadership and good technical guidance. The deep fundamentals of the Spanish economy are robust, but the analysis of our recent growth cycle and the current crisis evidences that there are many rigidities and frictions that affect many parts of the economic system. Recent developments have raised the prospect of higher tax burdens and their associated distortions in the near future. Consumers, firms, existing entrepreneurs, the new entrepreneurs needed for the recovery, present and future foreign investors with an interest in Spain, individuals deciding on their education and training, workers deciding on their careers, they all try to learn or anticipate how existing and future policies and regulations will affect their lives and the outcomes of their decisions.

b. Not a rose garden

The necessary adjustments are large and not free from significant political and social costs in the short run. The process cannot be properly guided by good

wishes and improvisation or by an indecisive testing of the waters, afraid of the short-term unpopularity of the policies to adopt. The society needs a clear guidance through the sacrifices and changes needed to reach a better functioning of the economy. As argued above, Spain may need something equivalent to a costly-to-accept "internal devaluation and definitely needs to boost its growth prospects through structural reforms that will erode the vested interests of many people.

c. A new paradigm

Fortunately for Spain, the list of pending structural reforms is well defined. But executing them is challenging and touches on delicate sociological and ideological features of the Spanish society. There is an urgent need for price adjustments and a realignment of incentives all over the place: across temporary and permanent workers, across occupational choices, across decisions to participate in and retire from the labor market, across different levels of academic performance, across different levels of performance in the job, in the use of the rights and prerogatives of the welfare state, in the management of public funds, in the reclassification of land, in the restructuring of the financial system... Many jobs must be created. Creativity needs to be encouraged. Effort, entrepreneurship, professionalism, competence, and diligence have to be rewarded.

d. A new mentality

The idea that we can all hope to live an easy life (based on a new bubble, an effortless economic miracle or some form of State help, as if it could simply fall from heaven) needs to be eradicated. A proper balance between insurance and incentives, generosity and sustainability needs to be stricken in the redesign of key aspects of the economy and our welfare state.

12. Afterword

I hope Spaniards and their political leaders (in cooperation with fellow Europeans) will be able to take the right course of action. And I hope international investors will keep their confidence in our economy. If these two conditions are met, I am sure the economic future of Spain will be bright.

References

Ayuso, J., and F. Restoy (2006) "House Prices and Rents: An Equilibrium Asset Pricing Approach", *Journal of Empirical Finance*, 13, pp. 371-388.

Banco de España (2010a) Financial Stability Report, 18, March.

Banco de España (2010b) "Quarterly Report on the Spanish Economy", *Economic Bulletin*, April, pp. 12-67.

Bentolila, S., J. Dolado, and J.F. Jimeno (2008) "Two-tier Employment Protection Reforms: The Spanish Experience", CES-Ifo-DICE, *Journal for International Comparisons*, 6(4), pp. 49-56.

Blanchard, Olivier (2007) "Adjustment within the Euro. The Difficult Case of Portugal", Portuguese Economic Journal, 6, pp. 1-21

Carbó, S., and J. Maudos (2010) "Ten Questions Concerning the Spanish Banking Sector", mimeo, Universidad de Granada.

Carrasco, R., J. F. Jimeno and C. Ortega (2008) "The Effect of Immigration on the Labor Market Performance of Native-Born Workers: Some Evidence for Spain", *Journal of Population Economics*, 21, 627-648.

de la Fuente, A. (2006) "La educación en las regiones españolas: Algunas cifras preocupantes", *Presupuesto y Gasto Público*, 44(3), pp. 7-49.

de la Fuente, A. (2010) "El nuevo sistema de financiación regional: Un análisis crítico y proyecciones para 2009", FEDEA, Economic Reports 05-2010.

de la Fuente, A., and R. Doménech (2010) "Ageing and Real convergente: Challenges and Proposals" in J. F. Jimeno (ed.), *Spain and the Euro: The First Ten Years*, Banco de España.

de la Rica, S., and A. Iza (2006). "Career Planning in Spain: Do Fix-term Contracts Delay Marriage and Parenthood?", in S. Gustafsson and A. Kalwij (eds.), *Education and Postponement of Maternity: Economic Analysis for Industrialized Countries*. Springer-Verlag.

Díaz-Giménez, J., and J. Díaz-Saavedra (2009) "Delaying Retirement in Spain", *Review of Economic Dynamics*, 12, pp. 147-167.

Dolado, J., F. Felgueroso and M. Jansen (2010) "El conflicto entre la demanda de flexibilidad laboral y la resistencia a la reforma del mercado de trabajo en España", *Papeles de Economía Española*, forthcoming.

Dolado, J., Jimeno, J. F., and C. García-Serrano (2002) "Drawing Lessons from the Boom of Temporary Jobs in Spain", *The Economic Journal*, 112, pp. 270-295.

Dolado, J., and R. Stucchi (2008) "Do Temporary Contracts Affect Total Factor Productivity?: Evidence from Spanish Manufacturing Firms", mimeo, Universidad Carlos III, Madrid.

Estrada, A., J. F. Jimeno, and J. L. Malo de Molina (2010) "The Performance of the Spanish Economy in EMU: The First Ten Years", in J. F. Jimeno (ed.), *Spain and the Euro: The First Ten Years*, Banco de España.

European Commission (2010) "Reinforcing Economic Coordination", Communication COM(2010) 250 final, May.

FEDEA (2009a) A Proposal to Restart the Spanish Labor Market", April, available at http://www.crisis09.es/PDF/restart-the-labor-market.pdf.

FEDEA (2009b) "Making the Housing Market Work. A Structural Reform Proposal", October, available at http://crisis09.es/vivienda/housing-proposal-with-notes.pdf.

FEDEA (2010) "La Reforma de las Pensiones", March, available at http://www.crisis09.es/pensiones/pensiones.pdf.

Fuentes, A. (2009) "Raising Education Outcomes in Spain", OECD Economics Department Working Paper No. 666.

García-Montalvo, J. (2007) "Algunas consideraciones sobre el problema de la vivienda en España, *Papeles de Economía Española*, 113, pp. 138-153.

González-Martínez, C., I. Conde-Ruiz, and M. Boldrin (2009) "Immigration and Social Security in Spain", FEDEA Documento de Trabajo No. 26.

Henn, C., K. Honjo, M. Moreno-Badia, and A. Giustinian (2009) "Spain: Selected Issues", IMF European Department, IMF Country Report No. 09/129, April.

IMF (2010) "Spain—2010 Article IV Consultation: Concluding Statement of the Mission", May 24, available at http://www.imf.org.

López García, M.-A. (2004) "Housing, prices and tax policy in Spain", Spanish Economic Review, 6, pp. 29–52.

Monasterio. C. (2002) "El laberinto de la financiación autonómica", *Hacienda Pública Española/Revista de Economía Pública*, 163, pp. 157-87.

Pisani-Ferry, J. (2010) "Euro Area Governance: What Went Wrong? How to Repair It?", VOX entry No. 5172, 17 June, available at http://www.voxeu.org.

Saurina, J. (2009) "Loan Loss Provisions in Spain. A Working Macroprudential Tool", Banco de España, *Revista de Estabilidad Financiera* 17, pp. 10-26.

Sosvilla-Rivero, S. (2008) "Immigration and Housing Prices in Spain", FEDEA Working Paper No. 2008-40.

End notes:

 2 See Banco de España (2010b) for the most recent assessment of the macroeconomic scenario.

³ Growth in (registered) foreign population is only a proxy of the net inflow of immigrants during these years since it (i) includes part of the natural movement of the foreign population in Spain, (ii) excludes the immigrants who obtained the Spanish nationality after their arrival, and (iii) does not include part of the immigrants who reside in Spain on an irregular legal basis.

⁴ See Carrasco, Jimeno, and Ortega (2008) for formal evidence.

⁵ Notice that a substantial part of the assets of the non-financial corporate sector are non-financial and, hence, not included in the denominator of the reported ratio.

⁶ See Estrada, Jimeno, and Malo de Molina (2010) for an overview.

⁷ See Bentolila, Dolado, and Jimeno (2008).

⁸ Ayuso and Restoy (2004) provide an early assessment of the overvaluation of real estate. Sosvilla-Rivero (2008) evaluates the contribution of immigration to housing prices. See García-Montalvo (2007) for an overview of the Spanish housing market.

⁹ I would not be able to provide a comprehensive review of the critical literature in this note. Additional references (in English or Spanish) can be found in official publications, including those from the Banco de España and the IMF, in the works available at the Economic Research Portal of the Banco de España (http://www.bde.es/investigador/), in the policy reports and forums of discussion promoted by FEDEA (http://www.fedea.es), and in the publications and working papers of many academics with a research focus on the Spanish economy.

¹⁰ See Dolado, Felgueroso, and Jansen (2010).

¹¹ See Saurina (2009).

¹² I am not aware of an outside estimate of the contribution of construction and real estate to government revenues. Using National Accounts data from Instituto Nacional de Estadística and in order to obtain just a rough indication, I added up all taxes specifically or significantly related to construction activities (such as fees from construction permits) and real estate holdings (property taxes, general wealth tax) or transactions (inheritance taxes, taxes on the acquisition of second-hand properties). These represented 1.9% of GDP in 1996 and 3.5% at their peak in 2006. I then imputed to construction (i) a part of the revenue from VAT (computed as 7%, the relevant tax rate, of residential investment), (ii) a part of the revenue from personal income taxes, taxes on professional activities and social security contributions (each of them computed as a fraction of the corresponding total equal to the share of construction in aggregate employment), and finally (iii) a part of the revenue from corporate income taxes (computed as a fraction of total corporate tax revenue equal to the share of construction in GDP). Adding these components resulted in an estimated overall contribution to government revenue of 4.5% of GDP in 1996 and 7.4% in 2006. Hence, the buoyant construction and real estate sectors might have inflated government revenue by an amount equivalent to 7.4-4.5=2.9% of GDP at the peak of the boom.

¹³ See González-Martínez, Conde-Ruiz, and Boldrin (2009).

¹⁴ Except, perhaps, through the proliferation of government sponsored enterprises mainly at the local and regional levels.

 $^{^{15}}$ See, for example, Díaz-Giménez and Díaz-Saavedra (2009) or de-la-Fuente and Doménech (2010).

¹⁶ See Monasterio (2002) for a description of the system that prevailed up to July 2009 and de-la-Fuente (2010) for the one introduced thereafter.

¹⁷ See Banco de España (2010a) for an analysis based on confidential accounting reports. Carbó and Maudos (2010) discuss the situation on the basis of publicly available data.

¹⁸ Savings banks in Spain are credit and deposit institutions originally attached to a province (or an even smaller territory) that, after a process of liberalization during the 1980s, became operationally almost identical to commercial banks. Legally they have the status of charitable institutions and their governing bodies are made of a mixture of representatives of the regional and local governments of the areas in which they operate, depositors, and employees. Their current status impedes them to issue voting shares or to be acquired in block (except after supervisory intervention) by another institution. They can, however, participate in voluntary mergers with other savings banks.

¹⁹ See Carbó and Maudos (2010).

²⁰ See de-la-Rica and Iza (2006).

²¹ See Dolado, Felgueroso, and Cansen (2010).

²² See Blanchard (2007) for an early proposal of this type for Portugal.

²³ For an excellent background on the need for structural reforms, see de-la-Fuente and Doménech (2010) and the references therein. See also Henn, Honjo, Moreno-Badia, and Giustinian (2009) for details on housing, banking, and aggregate productivity.

²⁴ De-la-Fuente (2006) and Fuentes (2009) describe some of the weaknesses of the Spanish education system.

²⁵ See Dolado, Jimeno, and García-Serrano (2002) or Dolado and Stucchi (2008) for assessments of the negative aspects of our dual labor market.

²⁶ This argument is clear in the reform proposal contained in FEDEA (2009a).

²⁷ See FEDEA (2010) for a motivated reform proposal for the pension system.

²⁸ See FEDEA (2009) for a motivated reform proposal for the housing market.

²⁹ IMF (2010) makes a clear statement in this regards.

³⁰ See European Commission (2010).

³¹ See, for instance, Pisani-Ferry (2010).