

IMPACT OF THE ECONOMIC CRISIS ON CATALAN GOVERNMENT FINANCES*

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Abstract

The purpose of this article is to analyse the impact that the economic crisis, which began in 2007, and the fiscal consolidation policies subsequently adopted have had on the finances of the Catalan government (Generalitat of Catalonia). The crisis seriously affected the Generalitat's tax revenues, mainly the Property Transfer Tax linked to the real estate sector. The fiscal consolidation policies applied on the revenue side have been determined by the taxing power of the Generalitat, which has no regulatory power over major taxes, except Personal Income Tax (IRPF), and very limited powers with regard to tax administration, which means the Generalitat's finances are subject to the advance payment system. Consequently, there has been a significant reduction in Catalan government expenditure, which has hit the welfare state services (health and education). Financial expenditure, on the other hand, increased considerably by generating deficit and debt. It may therefore be concluded that spending cuts on basic services have not only been caused by the crisis but also by the shortcomings of the regional financing model and the deficit targets set by the central government, lower than what would correspond to the Generalitat's responsibilities.

Key words: economic crisis; fiscal consolidation; public deficit; debt; indebtedness.

INCIDÈNCIA DE LA CRISI ECONÒMICA SOBRE LES FINANCES DE LA GENERALITAT**Resum**

Aquest article té per objectiu analitzar la incidència de la crisi econòmica que es va iniciar el 2007 sobre les finances de la Generalitat de Catalunya, així com les polítiques de consolidació fiscal aplicades. La crisi va afectar greument els ingressos impositius de la Generalitat, principalment l'impost sobre transmissions patrimonials lligat al sector immobiliari. Les polítiques de consolidació fiscal aplicades pel cantó dels ingressos s'han vist condicionades pel poder tributari de la Generalitat, sense capacitat normativa sobre els grans impostos, llevat de l'IRPF, i l'escassa capacitat de gestió tributària, que porta les finances de la Generalitat a estar sotmeses al sistema de bestretes. La conseqüència de tot plegat va ser una reducció important de la seva despesa, que va afectar els serveis de l'estat del benestar (sanitat, educació). Contràriament, les despeses financeres van augmentar notablement per la generació de dèficit i endeutament. Amb tot, es pot concloure que la retallada de la despesa en serveis bàsics no ha estat només a causa de la crisi sinó també de les deficiències del model de finançament autònom i dels objectius de dèficit fixats per l'Estat, més baixos dels que correspondrien pel volum competencial de la Generalitat.

Paraules clau: crisi econòmica; consolidació fiscal; dèficit públic; endeutament.

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1 Introduction

The economic crisis that broke out in 2007 has been long and drawn out. It is now possible to say we have reached the end of the tunnel but there are still some outstanding issues to be resolved before we can say that the Spanish economy is in an entirely satisfactory situation.

There have been several stages in the crisis and it has had a highly negative effect on the public purse. The purpose of this article is, therefore, to analyse what impact the crisis has had on Catalan government finances and how it has tried to mitigate the effects.

The article has seven sections, beginning with this introduction. The second looks at the two stages into which the economic crisis experienced in Catalonia can broadly be divided and the main measures adopted by the central government in each one. In the third section we deal with the Generalitat's non-financial revenues, placing particular emphasis on how the crisis affected its tax revenues and the fiscal consolidation measures that were adopted. The fourth section examines the Generalitat's expenditure throughout the crisis, as well as the fiscal consolidation policies applied on the expenditure side. Sections five and six respectively examine the evolution of the public deficit and the debt. Finally, section seven offers a summary and some conclusions.

2 Stages of the economic crisis in Spain

The economic crisis did not start in Spain but in the United States, with the subprime mortgages in 2007. However, it rapidly spread to Europe and Spain, where it burst the property bubble caused by house prices that were constantly rising above their real value.

It is the collapse of this property boom that gave rise to the crisis in Spain. In fact, it seems that the collapse might have occurred even without the international economic crisis, given an economic model based on construction rather than competitive and productive economic sectors. The crisis appeared when the construction sector, and all the subsectors that depend on it, stopped growing.

The property bubble was fuelled by a policy of easy money. Interest rates were low and mortgages were easily obtained, very often without any guarantee, although it was believed that the property provided a guarantee inasmuch as its value was continually increasing. That increased the demand for housing. Immigration and the purchase of tourist homes were other factors in that increase. As were the land liberalisation measures adopted by the PP (People's Party) government.

In fact, the Spanish government did nothing to avoid the boom as it also benefited from the resulting big increase in tax revenues.

We can highlight the following stages in the crisis experienced:

1st stage: 2007-2009. Although there were signs of a slowdown in 2007, GDP did not grow at a lower rate until 2008, which gave way to negative growth in GDP in 2009 (-3.33%, Table 1). Likewise, the unemployment rate went from 8.8% in 2007 to 14.9% in 2008 and 19.2% in 2009¹. During those two years, the Spanish government under Zapatero decided to tackle this new situation with fiscal expansion policies. It adopted fiscal measures to provide support for families and businesses worth €14 billion and €17 billion respectively, with a further €29 billion in credit through the Official Credit Institute (ICO).

¹ See Arriba, de and Kirby (2014).

Table 1											
Evolution of nominal GDP											
(Millions €)											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CATALONIA	189,854	203,403	209,005	202,028	203,324	200,185	195,209	193,126	196,866	205,017	212,804
SPAIN	1,007,974	1,080,807	1,116,225	1,079,052	1,080,935	1,070,449	1,039,815	1,025,693	1,037,820	1,079,998	1,118,522
% Year-on-year change											
Catalonia		7.14	2.75	-3.34	0.64	-1.54	-2.49	-1.07	1.94	4.14	3.80
Spain		7.23	3.28	-3.33	0.17	-0.97	-2.86	-1.36	1.18	4.06	3.57

Source: IGAE (General State Comptroller).

2nd stage 2010-2013. From 2010, the Zapatero government opted for austerity policies. In 2009, the Spanish public sector deficit reached an all-time high of 11.1% of GDP. Consequently, the directives arriving from Brussels were aimed at controlling the deficit and public debt, to the detriment of growth and employment. Economic policy gradually switched to deep spending cuts in order to comply with the deficit targets set by the European Union (EU).

The Zapatero government's first mistake was to deny there was a crisis at the outset, when all the other countries were already adopting measures to deal with it. The Spanish government not only acted late but badly. All that the first measures adopted did was to increase spending, but not the kind to revive the economy, which meant it merely created a big public deficit. Nor were the necessary structural reforms (labour market, financial sector, pension system, public administration and so on) implemented at the time.

EU pressure to control the public deficit led to Article 135 of the Spanish Constitution (SC) being amended on 27 September 2011. That was a consequence of the new European fiscal regulations (the Six-Pack) approved in 2011. Budgetary stability is based on the structural deficit, with the maximum limit set at 0.5% of GDP, although that may be extended to 1% if public debt is less than 60% of GDP and there is no risk of long-term financial instability. At the same time, the regulations require excessive debt to be eliminated at a rate of 1/20 every year over a period of 20 years.

The SC Article 135 amendment therefore entails adopting the above measures. It enshrines the principle of budgetary stability. It makes it impossible to incur structural deficits that exceed those set by the EU. It also establishes payment of public debt interest and capital as a priority and that the article itself would be developed in an organic law.

Mariano Rajoy won the general election held on 20 November 2011 but the economic policy of his new government continued in the same vein, with more cuts and austerity. A notable feature of this Rajoy period was the approval of the Organic Act on Budgetary Stability and Financial Sustainability (LOEPSF), which further developed SC Article 135, on 27 April 2012. The LOEPSF establishes the following:

- No public administration may incur a structural deficit from 2020 on. However, in the case of structural reforms, a structural deficit for all public administrations of 0.4% of GDP may be incurred.
- It sets a public debt ceiling of 60% of GDP (to be achieved by 2020), split between the three levels of government: central (44% of GDP), autonomous communities (ACs) (13% of GDP) and local (3% of GDP).
- Public administration expenditure (excluding interest, unemployment benefit and spending financed by earmarked revenues) may not exceed the medium-term GDP growth rate of the Spanish economy. This rule will be applied even in the event of more revenues being obtained than those forecast, as those will go towards reducing the public deficit. Likewise, the surpluses produced will go towards repaying the debt.
- It establishes the principle that paying public debt interest and capital before any other form of expenditure is an absolute priority.

- It gives the central government the power to set the budgetary stability and public debt targets for all the ACs and the targets for each one.

The latter point has put severe constraints on AC finances because the central government has set some very low deficit targets, without taking into account the fact they are responsible for welfare state expenditure excepte for pensions, and this accounts for one third of all public spending. Furthermore, in the event that ACs do not meet the deficit targets, the LOEPSF sets out a series of preventive, corrective and coercive measures to force them to comply.

To sum up, beginning in 2010 the Spanish government adopted an economic policy of fiscal consolidation, first under Zapatero and subsequently under Rajoy. The measures taken (a reduction in public expenditure, higher taxes, the introduction of co-payments and restricted access to certain public services, a reduction in the number of public servants and their salaries, no pension review, etc.) led to a big fall in internal demand because they were applied in the middle of a recession. The result was negative GDP growth and more unemployment.² Zubri (2012) analyses the debate over whether an expansionary fiscal policy or fiscal consolidation is the best way to get out of a recession. Empirical studies show that an expansionary fiscal policy leads to an increase in GDP which, in the Spanish case, Zubri quantifies a multiplier of around 1.5. Fiscal consolidation, on the other hand, reduces GDP. The International Monetary Fund (IMF) estimates that for each consolidation point, GDP contracts by 0.5 percentage points.

Finally, as can be seen in Table 1, GDP did not experience positive growth again until 2014.

3 Non-financial revenues³

3.1 Evolution

Table 2 shows the Generalitat's non-financial revenues and their component parts for the period 2007-2014. This includes the Generalitat's entire public sector administration: the various regional ministries, regional administrative bodies, the Catalan Health Service, the Catalan Health Institute and the Catalan Social Services and Assistance Institute. The share of local government in State revenues (PIE) and the European Agricultural Guarantee Fund (EAGF) have been excluded from total revenues as the Generalitat plays the role of intermediary between the payer and the recipient in the case of both these resources.

The non-financial revenues have been broken down into three components: the resources from the financing model, own resources and transfers, excluding those which correspond to the financing model.

Revenues from the financing model are based on two pillars: ceded taxes and transfers. Devolved taxes include those where tax resources are partially ceded (50% of Personal Income Tax-IRPF, 50% of VAT, 58% of excise taxes (IE)) and those where it is totally devolved (Wealth Tax, Gifts and Inheritance Tax, Property Transfers and Documented Legal Acts Tax, Electricity Tax, Gambling Tax and Tax on Certain Types of Transport).

Own revenues includes own taxes, i.e. those created by the Generalitat, rates and other revenues (except the Gambling Tax, which comes under financing model resources), property income and real investment disposal.

Revenue evolution between 2007 and 2014 was determined by three factors: extra resources provided by the new regional financing system introduced in 2009, the economic crisis and the impact of fiscal consolidation measures. In this period the Generalitat started from a healthy situation thanks to the tax revenues provided by the property boom, which was still the context it found itself in in 2007. Non-financial revenues fell by 1.2% in 2008 due to a fall in tax revenues. However, they increased by 12% in 2009, compared to 2008, thanks to the new financing system which provided extra resources. It was only in 2010 that the crisis really

² See Uxó (2014).

³ For a thorough analysis of Generalitat revenues between 2007 and 2014, and revenue side fiscal consolidation, see Ministry of Economy and Finance/Departament d'Economia i Coneixement (2016a).

began to have an impact and financial revenues fell, peaking at €20 billion in 2012 thanks to additional resources from concessions and asset sales.

Table 2								
Evolution in the non-financial revenues of the Generalitat of Catalonia*								
(Millions €)								
	2007	2008	2009	2010	2011	2012	2013	2014
Financing model	19,921	19,527	21,441	18,538	17,543	17,859	17,998	17,419
<i>% Model / Total</i>	<i>91.47</i>	<i>90.76</i>	<i>89.00</i>	<i>87.00</i>	<i>89.40</i>	<i>88.85</i>	<i>90.77</i>	<i>89.79</i>
Own revenues	459	468	515	571	567	1,251	911	1,062
<i>% Own revenues / Total</i>	<i>2.11</i>	<i>2.18</i>	<i>2.14</i>	<i>2.68</i>	<i>2.89</i>	<i>6.22</i>	<i>4.59</i>	<i>5.47</i>
Transfers **	1,398	1,520	2,136	2,198	1,513	990	920	919
<i>% Transfers **/ Total</i>	<i>6.42</i>	<i>7.06</i>	<i>8.87</i>	<i>10.32</i>	<i>7.71</i>	<i>4.93</i>	<i>4.64</i>	<i>4.74</i>
Total	21,778	21,515	24,092	21,307	19,623	20,100	19,829	19,400

(*) The revenues are recorded according to cash-flow criterion, which takes into account the year's advance payment and the settlements of the previous two years. They include the Generalitat's entire public sector administration: the various regional ministries, regional administrative bodies, the Catalan Health Service, the Catalan Health Institute and the Catalan Social Services and Assistance Institute.

(**) Without taking into consideration those linked to the financing model, the EAGF and the PIE.

Source: Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016a).

The regional financing model contributes approximately 90% of the Generalitat's non-financial resources. By 2008 and 2009 the crisis had already led to a reduction in the ceded taxes, as can be seen in Table 3, but an overestimation of the advance payments on the part of the Spanish Ministry of Finance⁴ and the extra resources provided by the new model approved in 2009 (€1.995 billion) compensated for the reduction in tax revenues and, therefore, meant the crisis was not felt until 2010. Moreover, the situation was made worse in 2011 by the return of negative settlements for 2008 and 2009, €691 million and €2.478 billion respectively.⁵ The return involved a number of annual payments: €138 million in 2011 and €303 million for each of the following three years.

Own revenues were less important, no more than 3% of financial revenues until 2011. Their relative importance grew from then on (reaching 6.22% in 2012) due to the fiscal consolidation process, which led to an increase in property revenues and real investment disposal, as well as user charges increase higher than the general rise in prices. Property revenues increased in 2012 following changes in the Aigües Ter Llobregat and Túnel de Vallvidrera i del Cadí management concessions. These resources also increased in 2013 and 2014 as a result of property sales. Own taxes have a very little weight, among these are two that should be mentioned, the Tax on Large Commercial Establishments and, from 2013, the Tax on Stays in Tourist Establishments (see Table 3).

Current and capital transfers not included in the financing model are the third pillar of non-financial revenues broken down in Table 2. It shows how their relative weight began to decline in 2011 (down from 10.32% in 2010 to 7.71% in 2011) due to the reduction in transfers from the Spanish State following the introduction of a policy to curb spending. The main reductions were in current transfers for education and grant programmes, and for dependent persons, as well as capital transfers for housing and infrastructure.

4 The Ministry of Finance estimates the resources it will transfer monthly in the form of advance payments to the Generalitat for the following concepts: shared taxes (IRPF, VAT and excise taxes), the Electricity Tax, the Basic Public Services Guarantee Fund and the Global Sufficiency Fund. The advances account for 98% of the forecasts. After two years, when the State knows the definitive resources of the above concepts, it settles the difference between the definitive amounts and the advance paid in year t-2 with the Generalitat.

5 The financing model advances were badly estimated in 2008 and 2009, so the final amounts were less than the forecast, resulting in negative settlements.

3.2 Tax revenues and fiscal consolidation policies

3.2.1 Taxing power of the Generalitat

In order to assess the scope of the revenue side fiscal consolidation policies applied by the Generalitat, we need to know what regulatory powers it has. Mention should be made of Act 22/2009, of 18 December, which regulates the financing of ACs and cities with a Statute of Autonomy under the common system and amends certain tax regulations, as well as Organic Act 3/2009, of 18 December, amending Organic Act 8/1980, of 22 December, on financing ACs.

ACs have a degree of regulatory power over all totally ceded taxes, except the Electricity Tax. Figure 1 shows which aspects of each totally devolved tax the ACs may take decisions on.

Act 22/2009 establishes the scope of the devolution and the connection points of each of the totally ceded taxes. These connection points determine the autonomous community that the income from each tax corresponds to. For example, in the case of taxes relating to property transfers, the criterion used to determine the income that corresponds to each autonomous community (connection point) is the place where the property is located, while in the case of personal taxes, the criterion is the habitual residence of the taxable person.

The fully ceded taxes are administered by the Generalitat with the exception of the Tax on Certain Means of Transport, the Tax on Retail Sales of Certain Hydrocarbons and Electricity Tax.⁶ The fully ceded taxes are administered by the Catalan Tax Agency (ATC), as provided for in the Statute of Autonomy, and which became operational on 1 January 2008.

Figure 1

The Generalitat's powers over ceded taxes

Tax	% Income	Regulatory power	Administration
Wealth	100%	Minimum exemption	ATC
		Rate	
		Deductions and allowances in the quota compatible with the State regulations	
Gifts and inheritance	100%	Reductions in the taxable base	ATC
		Tariff	
		Amounts and pre-existing wealth coefficient	
Property transfers	100%	Deductions and allowances in the quota compatible with the State regulations	ATC
		Tax rate on:	
		Administrative concessions	
		Transfers of moveable and immoveable property	
		Establishment and assignment of real property and guarantee rights	
Documented legal acts	100%	Leasing of moveable and immoveable property	ATC
		Deductions and allowances on acts where the ACs are empowered to set the rate that are compatible with State regulations.	

⁶ Given the particular features of administering it, the State Tax Administration (AEAT) collects all the tax and distributes the whole amount collected to the ACs, depending on the relative percentage of net electricity consumption.

		Deductions and allowances on documents where the ACs are empowered to set the rate that are compatible with State regulations.	
Gambling taxes	100%	Exemptions Taxable base Rate and quotas Rebates Accrual Application of taxes	ATC
Certain means of transport	100%	Increase the State tax rates by up to 15%	AEAT
Retail sales of certain hydrocarbons	100%	Rate within certain bands	AEAT
Autonomous community tranche of IRPF	50%	Personal and family minimum with a band of +/-10%	AEAT
		Scale applicable to the general taxable base, maintaining a progressive structure	
		Deductions for: - Family and personal circumstances - Non-business investments and earnings application - Non-exempt public grants and subsidies received from autonomous communities, earnings that form part of the saving tax base - Increases and decreases in the habitual residence deduction percentages	

- Family and personal circumstances
- Non-business investments and earnings application
- Non-exempt public grants and subsidies received from autonomous communities, earnings that form part of the saving tax base
- Increases and decreases in the habitual residence deduction percentages

ATC: Catalan Tax Agency

AEAT: State Tax Agency.

Source: Catalan Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016a), p. 16.

Regarding the regulatory power of AC government over partially ceded taxes, Act 22/2009 refers to the AC tranche of IRPF and specifies those areas ACs can decide on: the family and personal minimum, the scale of the general base tax rate, tax deductions and the habitual residence deduction percentages. ACs have no regulatory power over VAT or excise taxes (IE).

From the description on the Generalitat's taxing powers it can be seen that its regulatory power over ceded taxes is limited, as is its capacity for administering them, which is non-existent in the case of the main taxes, i.e. those that collect the most resources. Therefore, the weight of resources from ceded taxes over which the Generalitat has some regulatory power is 58% and only 13% if we take into account the taxes over which it has administrative power.⁷ That means it is highly dependent on the Spanish government, as the latter has to transfer all the resources managed by the State Tax Agency (AEAT) by means of monthly advances of the estimated collection forecasts (see note 4). If tax revenues grow more than the forecasts during the tax year, the Generalitat derives no benefit until two years later, when the final tax settlement is made.

⁷ See Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016a), p. 72.

ACs can also create new taxes, provided they do not tax taxable events taxed by the central government. This makes it really difficult to find areas not already taxed by the Spanish State and results in many taxes created by the ACs being suspended by the Constitutional Court (CC) following appeals by the State because they intrude on its areas or for other reasons of questionable constitutionality.

3.2.2 Evolution

It should be pointed out that the revenues in Tables 2 and 3 are recorded according to cash-flow criterion, which takes into account the year's advance payment and the settlements of the previous two years (see note 4). As has already been said, this system is open to criticism because if there are any increases in the taxes collected, the Generalitat does not derive any benefit from that until two years later. It therefore creates an imbalance in the economic cycle. This factor needs to be taken into account when it comes to assessing the evolution of the tax revenues in Table 3.

(Millions €)	2007	2008	2009	2010	2011	2012	2013	2014	2015
DEVOLVED TAXES	16,130	15,566	14,917	12,137	16,954	20,697	16,370	16,786	17,396
IRPF	5,189	5,940	7,194	5,473	8,056	9,441	6,852	6,763	7,292
VAT	4,187	4,317	3,273	2,439	4,539	6,502	5,047	5,320	5,259
IE	1,370	1,275	1,415	1,465	2,072	2,325	2,106	2,249	2,087
ITP & AJD	3,199	1,743	1,429	1,398	1,232	1,091	1,048	1,275	1,474
IP	454	537	2	13	13	305	563	431	462
ISD	844	1004	920	659	398	395	347	349	484
IDMT	369	212	143	137	100	73	50	55	69
Electricity tax	207	235	262	280	279	256	274	344	269
Tax on retail sales of certain hydrocarbons **	311	303	279	273	265	309	83		
OWN TAXES	11	13	12	14	14	16	52	58	97
TOTAL TAXES	16,141	15,579	14,929	12,151	16,968	20,713	16,422	16,844	17,493

(*) The revenues are recorded according to cash-flow criterion, which takes into account the year's advance payment and the settlements of the previous two years.

(**) Since 2013 it has been included in the Tax on Hydrocarbons (IE).

IE: excise taxes; ITP & AJD: Property Transfers and Documented Legal Acts Tax; IP: Wealth Tax. ISD: Gifts and Inheritance Tax; IDMT: tax on Certain Means of Transport.

Source: Settled budgets Spanish Ministry of Finance and Public Administrations.

Table 3 shows how tax revenues fell significantly in 2008, 2009 and 2010, from €16.141 billion in 2007 to €12.151 billion in 2010. The drop in consumer spending as a result of the crisis cut the resources provided by VAT by almost 50% between 2008 and 2010. Likewise, the collapse of the property boom particularly hit the Property Transfers and Documented Legal Acts Tax, which went from €3.199 billion to €1.398 billion between 2007 and 2010. Furthermore, under Act 4/2008, of 23 December, the Spanish government decided to discount 100% of the Wealth Tax. The justification for the measure was that this tax contributed little to redistributive justice as the big wealth owners have instruments for avoiding it. As of 2009, therefore, disappeared. The Spanish government compensated the ACs with a transfer which, in the case of the Generalitat, was €537 million, equivalent to the tax collected in 2008. The Tax on Certain Means of Transport also fell significantly due to the decline in car sales brought on by the crisis, as did the Gifts and Inheritance Tax, due to the drop in the value of assets and the measures adopted by the Generalitat to reduce the burden of this tax, which were stepped up from 2011 onwards.

Thus the downward trend in tax revenues was halted in 2011 and 2012. They reached €16.968 billion in 2011, when the effect of applying the financing model approved in 2009 was first felt. In 2009 and 2010, the

tax resources received were based on the old structure, and it was not until 2011 that the extra resources⁸ were consolidated in the new revenue structure, in other words, that the advances corresponding to the ceded taxes were made according to the share percentages of the new model.⁹ Thus the share of IRPF, VAT and excise taxes (IE) collected increased with the new percentages from 33% to 50%, from 35% to 50% and 40% to 58%, respectively. The increase in the IRPF rate approved by the Generalitat in 2010 also came into force in 2011.

Tax revenues grew again in 2012 and reached €20,713 billion due, once more, to the effect of the 2009 financing model (in 2012 the Generalitat received the settlements for shared taxes corresponding to 2010, when the advance payments were still calculated according to the old system in 2009) and the central government's fiscal consolidation policy, which involved increases in VAT and IE. Even so, the increased resources from these taxes did not represent a real increase in the Catalan government's resources as the increases were discounted from the Global Sufficiency Fund. At the same time, the Wealth Tax was reintroduced.

However, tax collection fell again in 2013 because the crisis and restrictive fiscal consolidation policies had a negative effect on employment and consumer spending, resulting in a significant fall in the two big central government taxes, IRPF and VAT.

From 2013, tax revenues began to recover and exceed the amount collected prior to the crisis, in 2007, reaching €17.493 billion in 2015. Yet, while the Transfers and Documented Legal Acts Tax did recover in comparison with the worst years of the crisis, the amount for 2015 did not even reach 50% of the figure for 2007, despite the fact that the Generalitat established measures (increase in the rate) to compensate for the fall. Nor did the Tax on Certain Means of Transport recover its pre-crisis levels, in part due to the fact that new cars pay less tax.

Regarding its own taxes, the Generalitat has created new ones during this period to increase its resources but many have been suspended by the Constitutional Court (CC).

Until 2012, the revenues from these taxes basically came from the Tax on Large Commercial Establishments. That year a €1 surcharge was introduced on medical prescriptions as a dissuasive measure. However, the CC declared it unconstitutional in Judgement 71/2014, of 6 May, and forced the Generalitat to return the money collected during the years when the surcharge was in force.

Also in 2013, the Catalan government created the Tax on Stays in Tourist Establishments leading to a notable increase in its own taxes, which rose from €16 million in 2012 to €52 million in 2013.

Another tax that should be mentioned in this period is the one on bank deposits, also suspended by the CC. It came into force in 2013 and, as it was levied from 31 December, it started to be collected in 2014. In fact, that was the only year it was collected. The CC annulled it with its Judgement 107/2015, of 28 May.

A series of environmental taxes also came into force in 2014, chargeable from 2015, namely, those on nitrogen oxides emissions into the atmosphere produced by commercial aviation; gas and particle emissions into the atmosphere produced by industry; the provision of content produced by electronic communications service providers, and the production of nuclear-powered electricity. However, the latter two have been suspended by the CC.

A tax on vacant housing also came into force in 2015. The Spanish government took it to the CC and it was suspended for five months, when the Court lifted the suspension. It is currently pending judgement. Should it be declared unconstitutional, all the income obtained from the tax would have to be returned, with interest.

Finally, in 2017, the Catalan government created more of its own taxes: the tax on non-productive assets of legal persons, the tax on carbon dioxide emissions from motor traction vehicles, and the tax on the environmental risk of the production, handling, transport, custody and emission of radiotoxic elements. The latter two were suspended by the CC.

⁸ These resources were €1.995 billion in 2009 and €2.415 billion in 2010.

⁹ All that was compensated for with resources from current transfers from central government.

Thus, the Catalan government's fiscal consolidation policies have been determined by restrictions on its taxing power. It has no regulatory power of any kind over the big taxes that are partially ceded, apart from IRPF. And it has exercised that power by establishing some of the highest marginal rates in the Spanish State. As the fully devolved taxes are linked to the real estate sector, the amount raised from these has fallen significantly, even though the Catalan government has increased the tax rate.

New taxes have repeatedly been created but in many cases they have been met by Spanish government appeals to the CC, which has then suspended them.

Finally, administering taxes does not help to ensure sufficient revenues either since, due to their being administered by the AEAT they are subject to the advance payment system which has many defects, as has been mentioned.

4 Expenditure¹⁰

As mentioned in Section 2, government policy at the start of the crisis was expansionary and restrictions on public spending were not introduced until 2010. That is reflected in Table 4, which shows the Generalitat of Catalonia's expenditure over the period 2007-2015. It gives the total spending for the Generalitat's main functions and, separately, expenditure excluding the "public deficit" function (debt amortisation and interest payments), non-financial expenditure, interest payments and non-financial expenditure excluding interest. That way it is easier to see real spending without the effect of financial expenditure, which has increased significantly due to the economic crisis

(Million €s)	2007	2008	2009	2010	2011	2012	2013	2014	2015
Basic public services	1,826	2,156	2,296	2,349	2,242	2,115	2,063	2,088	2,182
Social protection and promotion actions	2,336	2,890	3,445	3,586	3,550	2,970	2,679	2,998	3,325
Production of merit goods	14,620	15,685	19,106	16,441	16,170	14,408	13,636	14,270	16,088
* Health	8,651	9,167	12,164	9,567	9,831	8,729	8,186	8,926	10,294
* Education	5,544	6,065	6,508	6,426	5,963	5,388	5,179	5,067	5,504
* Culture	425	453	434	448	376	291	271	277	290
Economic actions	2,844	4,317	3,754	3,699	3,096	2,542	2,420	2,410	2,534
General actions	6,827	5,798	6,544	6,520	10,236	12,338	16,804	12,378	11,816
* Public debt	1,691	1,328	2,158	2,714	6,304	7,866	10,744	7,609	6,545
TOTAL	28,453	30,846	35,145	32,595	35,294	34,373	37,602	34,144	35,945
TOTAL EXCLUDING PUBLIC DEBT	26,762	29,518	32,987	29,881	28,990	26,507	26,858	26,535	29,400
TOTAL NON-FINANCIAL EXPENDITURE	25,721	28,327	32,515	29,411	29,480	26,916	26,495	27,239	29,103
INTEREST PAYMENTS	578	705	797	919	1,479	1,743	1,761	1,923	1,202
TOTAL NON-FINANCIAL EXPENDITURE EXCLUDING INTEREST	25,143	27,622	31,718	28,492	28,001	25,173	24,734	25,316	27,901

Source: Settled budgets. Spanish Ministry of Finance and Public Administrations.

Spending grew until 2009, increasing from €28.453 to €35.145 billion between 2007 and 2009, and from €26.762 to €32.987 billion if expenditure on the "public debt" function is not taken into account. There was

¹⁰ For a thorough analysis of Generalitat expenditure between 2007 and 2014, and the fiscal consolidation policies applied, see Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016b).

also the effect of the new financing model in 2009, which enabled a one-off credit to be approved. However, 2010 saw the introduction of fiscal consolidation policies, due to the fall in tax revenues, and compulsory compliance with the Budgetary Stability Act, which meant spending on the various policies began to fall, apart from that included in the “public deficit” function, which increased substantially as a result of the deficits generated, and it was not until 2015 that this trend changed.

Beginning in 2008, the European Central Bank cut the intervention interest rate but that did not compensate for the deficits generated and the increase in public debt. Table 4 shows the increase for interest payments, which tripled between 2007 and 2012-2013, and for the “public debt” function. Debt refinancing operations also increased in those years. All that was to the detriment of other spending policies.

If we analyse expenditure in the “production of permanent public assets” function, which includes spending policies on health, education and culture, we can see how it fell by €2.665 billion between 2009 and 2010, from €19.106 to €16.441 billion. It continued to fall in the following years, reaching its lowest point of €13.636 billion in 2013. Then it recovered in 2014 and 2015, reaching €16.088 billion in the latter. However, it represented 54% of total spending in 2009 and only 45% in 2015, so its relative weight has fallen.

The most important fiscal consolidation policies pursued from 2010 included the following:

- 2010: restraints on studies, reports and protocol; salaries of senior officials frozen.
- 2011: reduction in universal benefits for dependent children; staff measures (contributions to the pension plan for the Generalitat’s public sector workers suspended); 50% reduction in the social action fund; investments in all areas rescheduled.
- 2012: average 5% cut in the salaries of the Generalitat’s public sector staff, as well as in salary premiums and fringe benefits; cuts in almost all budget items. Likewise, on 15 May that year, an adjustment plan was approved to reduce spending by €1.5 billion which, among other measures, specified the reduction in salaries, the rescheduling of investments and the sale of public assets.

The Spanish government subsequently approved two royal decree-laws (RDL) that rationalised spending on health and education.¹¹ As a result, the Catalan government approved another adjustment of €1.804 billion, of which €1.069 billion were related to the Spanish government’s measures and €735 million were to reduce transfers and contributions to public sector bodies of the Generalitat, reschedule investments and for new salary measures. The central government later cancelled the December extra payment to public sector workers, which subsumed the 5% salary cut planned by the Catalan government.

- 2013 and 2014: suspension of the extra payment maintained; 2013 also saw the application of measures to adjust the surface rights charges that Catalan government departments pay to Infraestructures de la Generalitat.

In addition to the above measures, others were applied to simplify the Generalitat’s public sector structure, as well as rationalise and resize government bodies. Various redundancy exercises were also carried out. As regards investment, the biggest reductions affected Infraestructures Ferroviàries de Catalunya, where it went from €1.001 billion to €101 million between 2008 and 2014, and Infraestructures de la Generalitat, where it was reduced from €1.260 billion to €250 million between 2010 and 2014.

5 Public deficit

5.1 Evolution

The public deficit is calculated in ESA terms, i.e. in accordance with the European System of National and Regional Accounts, the methodology which has to be used to assess the fiscal consolidation and adjustment process.

¹¹ RDL 14/2012, of 20 April, on emergency measures to rationalise public spending on education, and RDL 16/2012, of 20 April, on emergency measures to guarantee the sustainability of the National Health System.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CATALONIA	-0.85	-2.89	-2.51	-4.48	-4.11	-2.27	-2.15	-2.66	-2.84	-0.93
AC AVERAGE	-0.32	-1.71	-2.01	-3.17	-3.35	-1.87	-1.58	-1.78	-1.73	-0.84
TARGET	-0.02	-0.75	-0.75	-2.40	-0.75	-1.50	-1.30	-1.00	-0.70	-0.70

NB The 2007 target was set as a % of national GDP. From 2008 it was set as a % of regional GDP.

Source: IGAE.

Table 5 shows how the Generalitat's deficit evolved between 2007 and 2016, as well as the average deficit for ACs and the target set by the central government. It confirms the marked increase that occurred in the deficit between 2007 and 2008, when it rose from 0.85% to 2.89% of GDP following the outbreak of the economic crisis. It improved slightly in 2009, to 2.51%, thanks to the additional resources from the new financing model and the higher estimate for the ceded tax advances. However, the crisis made itself felt again in 2010, when the deficit climbed to 4.48% of GDP, the highest figure throughout the period studied. Table 3 shows how tax revenues were at their lowest the same year.

Fiscal consolidation measures began to be applied in 2010, so the deficit started to come down. Despite that, it rose slightly again in 2014 and 2015 because the forecast income from the sale of public buildings did not materialise, certain accounting adjustments were made and compliance with the Constitutional Court's ruling on the €1 per prescription meant the revenue raised from this tax in previous tax years had to be returned.

The following year, 2016, closed with a deficit of 0.93%, much closer to the level it was in 2007 at the start of the crisis: 0.85% of GDP.

Throughout the period analysed it can be seen that the Generalitat's deficit was higher than the average for all ACs, even though the trend was the same. It can also be seen that deficit target has never been met. However, it has to be said that the targets set by the Spanish government have been very unfair on the ACs, because it has passed the deficit onto them. If we take into account that they are responsible for the welfare state, apart from social security, and that they manage a third of all public sector spending, the targets set do not correspond to their responsibilities.

Therefore, the targets set by the central government and the deficiencies of the financing model are partly to blame for the Generalitat having been forced to cut spending on the basic services of the welfare state.

5.2 Cyclical deficit and structural deficit¹²

The deficit can be broken down into cyclical deficit and structural deficit. The cyclical part of the public deficit is explained by the economic conjuncture. So, taking the cyclical deficit from the total deficit will give us the cycle-adjusted deficit which, in turn, after subtracting one-off measures, will give us the structural deficit. (Remember that under the Budget Stability and Financial Sustainability Act no public administration can incur a structural deficit from 2020.)

The European Commission has created a method for calculating the cyclical deficit based on two variables: the output gap, which is the difference between actual production and potential output and is expressed as a percentage of GDP,¹³ and the sensitivity of the budget balance to the cyclical situation (semi-elasticities), which shows the response of the public accounts to the economic cycle.

¹² See Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016c).

¹³ If the output gap is positive it shows output is above the potential level; if it is negative, it is below the potential level.

Cyclical deficit and structural deficit					
(Debt-to-GDP ratio %)					
	2010	2011	2012	2013	2014
Cycle-adjusted deficit	-3.68	-3.08	-0.90	-0.62	-1.42
Structural deficit	-3.41	-3.08	-1.89	-0.88	-1.33
Primary structural deficit	-2.89	-2.20	-0.98	0.13	-0.35

Source: Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016c).

Table 6 shows the cycle-adjusted deficit, the structural deficit and the primary structural deficit (structural deficit excluding interest payments) for the Generalitat during the period 2010-2014. The importance of the one-off measures in 2012 can be seen in the difference between the cycle-adjusted and structural deficits. Between 2010 and 2014, the latter had an average annual adjustment of 0.52%, very close to the 0.5% recommended by the EU. If the structural deficit is measured without interest, the annual average of the adjustment was 0.6%.

6 Indebtedness

6.1 Evolution

Table 7 shows the evolution of the Generalitat's debt level between 2007 and 2016 in relation to GDP. In 2007, the debt was €15.776 billion and relatively low at 7.8% of GDP. By 2016, however, it had risen to 35.3% of GDP and stood at €75.118 billion.

The public deficit caused by the economic crisis largely explains this evolution and it is noticeable that the debt seems to have stabilised since 2014 as the economic situation has improved. It should also be pointed out that changes in how the debt is calculated may explain some increases. These changes are:¹⁴ a) an increase in the number of entities classified as being in the Generalitat's public sector; b) the inclusion of financial operations (factoring and emphyteutic leases) within the scope of ESA which, until then, were not considered public administration; c) recording public-private transactions under public administration not previously classified under that heading.

Regarding the Generalitat's debt in relation to the other ACs, Table 7 also shows the evolution in total AC debt, similar to that of the Generalitat, and the weight of the latter's debt in relation to the ACs as a whole. It can be seen how this weight grew between 2007 and 2011 from 25.5% to 30.2% of total AC debt but fell in the following years to 27.1% in 2016. It can therefore be deduced from the figures that the Catalan debt is higher than the average for all ACs.

Evolution of the debt according to the excessive debt protocol (EDP)										
(Debt-to-GDP ratio %)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CATALONIA	7.8	10.0	12.7	17.5	22.0	26.8	30.1	32.7	35.4	35.3
AC TOTAL	5.7	6.7	8.6	11.5	13.6	18.2	20.5	22.9	24.4	24.8
TARGET							29.8	32.7	30.4	35.2
CATALONIA / AC TOTAL (%)	25.5	28.0	27.5	28.7	30.2	27.7	27.6	27.1	27.6	27.1

Source: Spanish Ministry of Finance and Public Administrations.

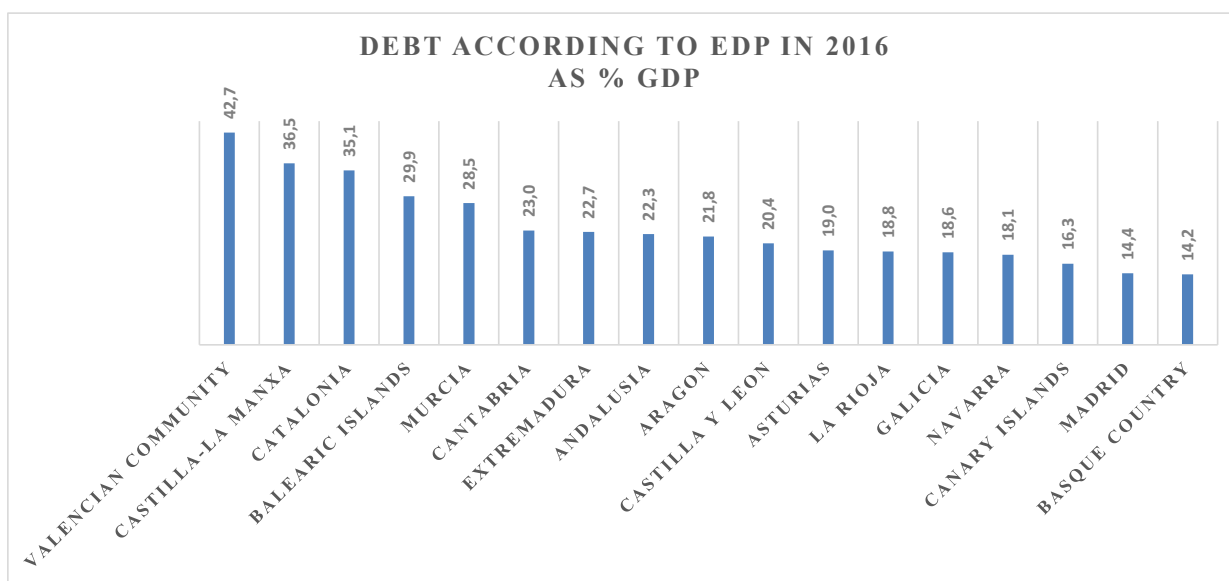
¹⁴ See Ministry of Economy and Knowledge/Departament d'Economia i Coneixement (2016c).

However, there are very considerable differences in the debt level between the ACs, which are broken down in Chart 1. The gap extends from Valencia's debt, which represents 42.7% of its GDP, to 14.2 % in the case of the Basque Country.

Numerous works can be found which analyse the factors determining the debt and deficit levels of the various ACs.¹⁵ The conclusion drawn is that the least indebted are those that benefit most from the AC financing system and the regional development fund. Thus, Lago (2002) notes that the regions that have received the most funds have incurred the least debt and made less use of their own taxes.

Those that are subject to Article 151 (of the Constitution) are more indebted because they were given responsibility for health and education before, and this expenditure, mainly on health, has a very big expansionary effect.¹⁶

Chart 1



Source: Banco de España

6.2 Autonomous Community Liquidity Fund (FLA)

Royal Decree-Law 21/2012 established the Autonomous Community Liquidity Funde (FLA). The increase in AC debt and its maturities, once the financial markets had been closed to them, put the ACs in a very difficult position. The central government therefore set up the FLA, a liquidity fund to help them deal with their debt maturities.

The Generalitat's financial position meant it was forced to join and comply with a series of fiscal and financial conditions. Likewise, each AC has to draw up an adjustment plan that ensures compliance with the deficit targets and reimbursement of the amounts provided by the fund. This plan is updated annually and monitored by Spain's Ministry of Finance.

In September 2017, the Generalitat had a debt of €76.381 billion, of which €53.005 billion corresponded to FLA funding and represented 69% of its debt.

¹⁵ See Bosch (2013).

¹⁶ See Mussons (2009).

7 Summary and conclusions

The collapse of the property boom provoked the economic crisis in Spain, which made itself felt primarily from 2008. Our economic model based on construction rather than competitive sectors, an easy money policy and the lack of structural reforms were the causes behind its rapid expansion. The crisis can be divided into two periods: the first, 2007-2009, when expansionary spending policies were adopted to tackle it but only made it worse because it was not the type of spending to revive the economy; and the second, 2010-2013, when the fiscal consolidation policies imposed by the EU began to be adopted. In this period particular mention should be made of the amendment to Article 135 of the Spanish Constitution, which enshrines the principle of budgetary stability, and its subsequent development in the LOEPSF.

Between 2008 and 2009, Catalonia's GDP fell to a negative growth rate of 3.34% and in 2013 it dropped to its lowest nominal value of €193.126 billion, whereas it was €209.005 billion in 2008. It began to register positive growth rates again in 2014 and by 2016 had reached €212.804 billion.

The evolution of non-financial revenues between 2007 and 2014 was determined by the extra resources provided by the new regional financing system introduced in 2009, the economic crisis and the impact of fiscal consolidation measures. The crisis really began to be noticed in 2010, because in 2009 its impact was compensated by the new AC financing model approved in 2009. While the Generalitat's financial revenues were €21.778 billion in 2007, by 2014 they had dropped to €19.400 billion, despite the fiscal consolidation measures adopted to increase them.

The Generalitat's non-financial revenues can be broken down into three components: those deriving from the financing model, the government's own revenues and transfers. The financing system resources contribute approximately 90% of the Generalitat's revenues. Despite the fall in tax revenues, these resources did not start to fall significantly as a result of the crisis until 2010, due to the effect of the Ministry of Finance's overestimation of the advance payments and the additional resources provided by the new financing model in 2008 and 2009.

The Generalitat's own revenues (its own taxes, rates, property income and real investment disposals) were no more than 3% of non-financial revenues until 2011. From then on their weight increased (to 5%-6%) because the fiscal consolidation policies have led to an increase in property income and income from the disposal real investments. A tax on stays in tourist establishments was also introduced.

The third pillar of the Generalitat's non-financial revenues consists of the transfer of resources outside the autonomous community financing model. During the period analysed, their relative weight was reduced due to the central government's spending curbs which affected educational programmes and grants, dependent persons, housing and infrastructure. Thus, between 2007 and 2014, the transfers went from 6.42% of financial income to 4.74%.

The crisis significantly reduced the Generalitat's tax revenues, which fell from €16.141 billion to €12.151 billion between 2007 and 2010. From that year on they started to recover and reached €17.493 billion in 2015. The fiscal consolidation policies adopted by the Catalan government to increase its tax revenues were conditioned by its limited taxing power. It should be pointed out that during the period of this study the Catalan government increased the marginal rate of IRPF and the Transfers Tax on a number of occasions. However, as the latter is related to the property sector, there has been no return to the pre-crisis collection rates. The Generalitat has also created new taxes but many of them have ended up being suspended by the CC. Nor is achieving tax sufficiency helped by the fact that the taxes which raise most are managed by the Spanish Tax Agency and that money is only available through the advance payment system, which has many shortcomings and means the Generalitat cannot benefit from any increase in the tax collected until two years later, when the final tax settlement is made.

As has already been said, the first stage of the crisis saw expansionary spending policies. Thus, between 2007 and 2009, Catalan government spending increased from €28.453 to €35.145 billion. The one-off credit from the new financing model in 2009 also had an effect. But from 2010, spending declined as restrictive fiscal consolidation policies were applied. These were brought about by the fall in tax revenues, the increase

in public deficits and the Budget Stability Act. Spending on permanent public assets (health, education and culture) fell from €19.106 billion in 2009 to €13.636 billion in 2013. From then on it began to recover.

The evolution of non-financial revenues and expenditure described above explains the public deficit seen between 2007 and 2016. During that period, the Generalitat's deficit was at its highest, 4.48% of GDP, in 2010. From then on the fiscal consolidation policies reduced it to 0.93% of GDP in 2016. Throughout the whole period the Generalitat's deficit was above the AC average and the deficit target was only met once, in 2013. It also needs to be said that the Spanish State has passed the deficit onto the ACs, setting very low deficit targets difficult for them to meet given the nature of their responsibilities. That may explain some of the cuts in spending.

The consequence of generating this deficit has been to increase the Generalitat's debt, from 7.8% of GDP in 2007 to 35.3% in 2016. Moreover, in September 2017, 69% of that debt corresponded to funding obtained through the Autonomous Community Liquidity Fund (FLA).

In 2016, Catalonia was the third most indebted AC. There are many reasons for the Generalitat's debt but, apart from the economic crisis, there are studies which show that the most indebted ACs are the ones that benefit most from the AC financing system and the regional development fund.

In conclusion, we can say that the economic crisis has seriously harmed the Generalitat's finances but also that the shortcomings of the financing system and the central government's fiscal consolidation policies, passing the deficit onto the ACs, has made them worse.

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