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Joan Costa-i-Font

# Furthering Sub-central Autonomy in Europe? The Roles of Identity and Redistribution

The European Union is regarded as a union of diverse territories, but this definition applies to most European Union member states, too. How best should member states manage diversity to maintain the Union? What are the main triggers for autonomy demands in a Union? This article contends that the progressive expansion of regional identities as a response to European integration acts as the main trigger of demand for regional autonomy. This paper draws upon descriptive evidence from two affluent and distinctive Spanish regions, Catalonia and the Basque Country, from 1982 to 2007. Explorative regression analysis of survey data suggests that sub-central identity exceeds that of taming regional redistribution in determining support for regional autonomy.

Europe faces the dilemma of how best to redesign its institutions towards more unity whilst maintaining its diversity of preferences and needs. Both aims are reflected in policy compromises. We know from old theories of fiscal federalism that the challenge of allocating powers to different levels of government lies in keeping the right balance between the old preference matching<sup>1</sup> and the maintenance of common institutions, especially when regional political cycles ignite heterogeneous political agendas in different parts of the union.

Inevitably, even when power is reasonably allocated, governments at different levels compete for political power. Some level of competition between European and member state governments is not only inevitable but arguably welfare improving.<sup>2</sup> However, when federations fail to allocate political powers to satisfy democratic demands for either further autonomy or deeper integration, institutional reform can act to maintain stability and avoid conflict. Little is known about the mechanisms that prompt the re-balancing of power resulting from demands for further re-

gional autonomy. Therefore, economic policy design can benefit from further understanding of how jurisdictions rebalance their power allocation.

This paper draws upon data from two Spanish regions, Catalonia and the Basque Country, from 1982-2007 to examine two mechanisms that can each independently influence support for regional autonomy, namely the strengthening of sub-central identity and improved regional fiscal redistribution.<sup>3</sup> We attempt to contribute by examining the trends and potential associations between measures of both regional redistribution and sub-central identity and support for regional autonomy. This is particularly important in the case of Spain, given that unlike other countries, industrialisation took place in the two above-mentioned regions rather than at the centre. Whilst the role of fiscal redistribution is generally claimed to be the main variable explaining jurisdictional reform in the public choice literature, we argue that identity plays a large, and possibly more important, role.

The empirical strategy followed in this study is firstly to identify and map patterns of fiscal redistribution during the period under consideration. For this purpose, we measure the so-called *fiscal residuum* – the net benefit from eliminating the existing regional fiscal redistribution – and apply a simple multiplier to compute the income ef-

<sup>1</sup> W. Oates: Fiscal Federalism, Harcourt-Brace, New York 1972.

<sup>2</sup> A. Breton: Competitive Governments. An Economic Theory of Politics and Public Finance, Cambridge University Press, New York 1996.

<sup>3</sup> We rely on the two regions that are potential candidates to become independent, given that regional parties and organisations dominate their institutions and political systems. Given that a constitutional crisis took place after 2010 (after the Constitutional Court outlawed the most sensible part of the next Catalan Statute), this paper looks at the 1982-2007 period.

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fects. Simultaneously, we map the patterns of sub-central identity.<sup>4</sup> The paper proceeds by using regression analysis of the latest year of survey data to examine the association of both identity (identity effect) and the fiscal residuum (fiscal effect) in explaining support for further regional autonomy.

Our findings indicate that, as expected, support for regional autonomy results from both the strengthening of sub-central identity and the unwillingness to redistribute fiscal resources on a state scale. However, the “identity effect” is found to exceed the “fiscal effect” by a magnitude of seven to one, and it is perceived more intensely among highly educated individuals.

### Institutions and sub-central autonomy

State responses to sub-central heterogeneity are often determined by country-specific historical legacies. In Canada, Switzerland and Belgium, and more recently in Spain and the United Kingdom, institutional accommodation of regional heterogeneity has taken place through governmental decentralisation in the latter countries and explicit state federalisation in the former. When all parties regard the constitutional allocation of power as satisfactory, the state tends to be regarded as stable. Yet, is such an institutional equilibrium stable? What explains further demands for regional autonomy?

### Limits to redistribution

Regional redistribution has received some attention as a driver for regional autonomy.<sup>5</sup> Evidence shows that when interregional income inequality grows, political disintegration (e.g. leaving the Union) becomes more likely.<sup>6</sup> Economic theory predicts that the disintegration of a nation might result from both economic and fiscal considerations.<sup>7</sup> Not surprisingly, there is extensive evidence of the importance of regional redistribution in both the economic and political economy literature. Bolton and Roland find that poorer regions will prefer to join richer regions in or-

der to maintain redistribution flows, while richer regions may prefer to go alone.<sup>8</sup> Thus, the thread of political disintegration serves to limit regional redistribution, as richer regions are more likely to seek self-determination to avoid paying transfers to poorer regions.<sup>9</sup>

Similarly, earlier studies on the economics of nationalism argue that such a process can be explained by a model of elite competition.<sup>10</sup> Hence, the vertical competition processes mentioned above would mainly be the institutional manifestation of processes of competition between regional and state elites.<sup>11</sup> Such competition is very common in more affluent regions.<sup>12</sup> However, if demands for autonomy are elite-driven, what role does identity play? Furthermore, how does identity fit in the limited economic literature?

### The role of sub-central identity

As Frey states, people’s desire for embeddedness might act as a mechanism influencing the heterogeneity of institutional designs.<sup>13</sup> Organisations compete not only for resources but also for political power and institutional legitimacy.<sup>14</sup> Sub-central identity plays a role as a mechanism of differentiation and as a source of social embeddedness. Sub-central identity acts as a non-monetary payoff of individuals’ actions through external effects on individual preferences,<sup>15</sup> and it provides “symbolic utility”.<sup>16</sup>

- 4 See G. Brosio, F. Revelli: The political economy of regional opting out: distributive implications of a prospective Europe of Regions, in: *Economics of Governance*, Vol. 4, No. 2, 2003, pp. 127-142.
- 5 A. Alesina, E. Spolaore: On the Number and Size of Nations, in: *Quarterly Journal of Economics*, Vol. 112, No. 4, 1997, pp. 1027-1056; A. Alesina, E. Spolaore, R. Wacziarg: Economic Integration and Political Disintegration, in: *American Economic Review*, Vol. 90, No. 5, December 2000, pp. 1276-1296.
- 6 T. Ellingsen: Externalities vs Internalities: a Model of Political Integration, in: *Journal of Public Economics*, Vol. 68, No. 2, 1998, pp. 251-268.
- 7 J.M. Buchanan, R.L. Faith: Secession and the limits of taxation: towards a theory of internal exit, in: *American Economic Review*, Vol. 77, No. 5, 1987, pp. 1023-1031.

- 8 P. Bolton, G. Roland: The Breakup of Nations: A Political Economy Analysis, in: *Quarterly Journal of Economics*, Vol. 112, No. 4, 1997, pp. 1057-1089.
- 9 J.M. Buchanan, R.L. Faith, op. cit.; R. Young: Economic Calculus in the Secession Calculus: A Survey, paper presented to the Conference of Economics of Political Integration and Disintegration, CORE, Belgium 2002; M. Le Breton, S. Weber: The Art of Making Everybody Happy: How to Prevent a Secession, Working Paper, No. 01/176, 2001, International Monetary Fund.
- 10 A. Breton: The Economics of Nationalism, in: *Journal of Political Economy*, Vol. 72, No. 4, 1964, pp. 376-386.
- 11 A. Breton: Competitive Governments ..., op. cit.
- 12 P.A. Gourevitch: Paris and the Provinces: The Politics of Local Government Reform in France, Berkeley 1980, University of California Press.
- 13 B. Frey: A Multiplicity of Approaches to Institutional Analysis. Applications to the Government and the Arts, CESifo Working Paper, No. 2727, 2009.
- 14 Hence, multilevel governments tend naturally to develop different forms of vertical competition – see J. Costa-Font, A. Rico: Vertical competition in the Spanish National Health System (NHS), in: *Public Choice*, Vol. 128, No. 3-4, 2006, pp. 477-498, for an example of how the latter takes places within the context of Spanish National Health System. P.J. DiMaggio, W. Powell: The iron cage revisited: institutional isomorphism and collective rationality in organizational fields, in: *American Sociological Review*, Vol. 48, 1983, pp.147-160.
- 15 G. Akerlof, R. Kranton: Economics and Identity, in: *Quarterly Journal of Economics*, XXV.
- 16 U. Pagano: Nationalism, Development and Integration: The Political Economy of Ernest Gellner, in: *Cambridge Journal of Economics*, Vol. 27, No. 5, 2003, pp. 623-646.

Hence, changes in the intensity of identity might explain support for sub-central autonomy.

The role of social returns is formulated in the context of the literature on the size of nations.<sup>17</sup> This literature argues that country size results from a trade-off between the “benefits of market size” and the “costs of population heterogeneity”. In such a setting, sub-central identity increases the costs of population heterogeneity and reduces the optimality of large states.

### Two case studies: Catalonia and the Basque Country

Admittedly, testing such an interaction requires access to data that possibly is not yet available. However, it is possible to examine a case study to identify trends and associations. In addition, it is possible to contextualise and enrich evidence on trends. This section explores the historical background, the economic models of capitalism and the experiences of political disintegration in Catalonia and the Basque Country.

The Spanish state is the product of the progressive integration and disintegration of kingdoms and territories of the Iberian Peninsula. Portugal gained independence in the 17th century. In the 16th century, the Castilian (or Spanish) language became the *lingua franca* of the region, with the exception of Catalonia and the Basque Country. During the 18th century, in an attempt to mimic centralisation processes in other nations, the rights of self-government of Catalonia were abolished. However, the attempt proved less effective than in other countries. Nation-building was not an easy business in Spain, as it did not succeed in creating a national consciousness throughout the country. Spanish was not imposed as a single language until 1888 and was not declared the official language until 1931. The Spanish single market was completed in 1876 with the end of a set of civil wars which removed the fiscal and transport privileges of the Basque Provinces, and the single currency, the peseta, was introduced in 1868. The outlaw of legal and self-government institutions coincided with the development of Catalan and Basque languages, which paralleled regionalist demands. The Catalanist Union was set up in 1891 and the Basque Nationalist Party in 1895. Finally, the loss of Spanish control of Cuba and Puerto Rico in 1898 ended economic regional self-interest in a strong nation state and weakened popular support for the Spanish nation-building project.

<sup>17</sup> A. Alesina, E. Spolaore, R. Wacziarg, *op. cit.*

Although Catalans and Basques cooperated with the Spanish state in different ways, cooperative agreements did not always prove fruitful. Most notably, cooperation failures include the first republican experience in 1873-4 (presided over by two Catalan presidents with the intention to set up a federal state), and more importantly, the breakdown of the Second Republic (1931-36). During the Second Republic, Catalonia was granted some regional autonomy for the first time, and the Catalan language was officially recognised (as was Basque). After the Spanish Civil War, both languages were repressed and lost their official status until the restoration of democracy in the late 1970s. The transition to democracy brought the re-establishment of Catalan and Basque institutions and political decentralisation, primarily in areas of social policy and other responsibilities included in the regions' respective Statutes of Autonomy which were passed in the early 1980s. From a fiscal perspective, only the Basque Country (and Navarre) was granted full tax autonomy. At the same time, the resource allocation of Catalan tax administration was integrated in a centralised revenue collection system together with other regions, which effectively opened the door to widespread regional redistribution. Catalonia became one of the highest contributors to the funding of other regions.

However, moderate redistribution was envisaged as an implicit exchange for autonomy. Political decentralisation allowed both the Basque and Catalan governments to design their own policies on health, education, social care, culture and language.<sup>18</sup> Catalan and Basque became official languages, along with Spanish, in their respective regions. Both Catalonia and the Basque Country established their own regional TV channels and required all civil servants to attain some proficiency in the regional language. Catalonia made its language compulsory at schools.<sup>19</sup> However, the institutional setting did not enable the development of institutions equivalent to those of a federal state.

After 2002 a new wave of regional autonomy demands arose from both the Catalan and Basque governments to unilaterally modify their institutional relationships with the Spanish state towards institutionalised federalism by means of reforming their regional statutes. The Basque

<sup>18</sup> J. Costa-Font: Does devolution lead to regional inequalities in welfare activity?, in: *Environment and Planning C: Government and Policy*, Vol. 28, No. 3, 2010, pp. 435-449; J. Costa-Font, J. Pons-Novell: Public health expenditure and spatial interactions in a decentralized national health system, in: *Health Economics*, Vol. 16, No. 3, 2007, pp. 291-306.

<sup>19</sup> O. Aspachs, I. Clots-Figueres, J. Costa-Font, P. Massella: Compulsory language educational policies and identity formation, in: *Journal of European Economic Association*, Vol. 6, No. 2-3, 2008, pp. 434-444.

Parliament passed a reform of the regional statute with the support of 56 per cent of its members, although it failed to obtain the approval of the Spanish Parliament. In contrast, the Catalan Statute received the support of 91 per cent of the members of the Catalan Parliament, was heavily amended by the Spanish Parliament and got an outstanding 75 per cent support in an ensuing referendum. However, a ruling of the Constitutional Court in 2010 outlawing the key feature of a democratically legitimised Statute triggered constitutional crises in 2012.

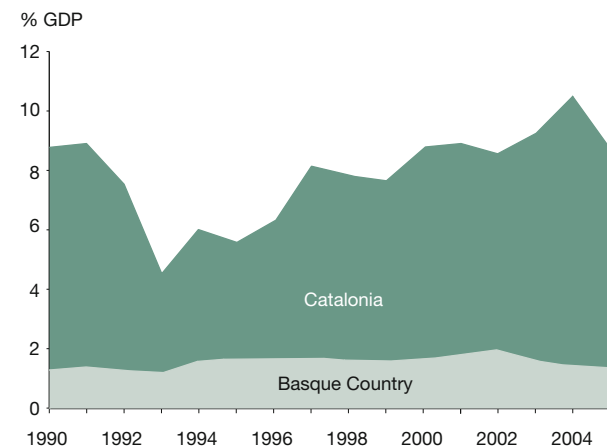
## Empirical evidence

### Regional redistribution

The extent of regional redistribution taking the form of regional fiscal imbalances vis-à-vis the rest of Spain is reported in Figure 1. It is shown that the Catalan fiscal deficit amounts to eight to ten per cent of total GDP, while in the Basque Country, due to its special fiscal arrangements (the Basques collect their own taxes and negotiate their contribution to Spain), the fiscal deficit is not more than two per cent of GDP.<sup>20</sup> The Catalan fiscal deficit in 1997 (8.1 per cent of GDP) was considerably higher than that of contributor regions in other countries such as Bavaria (3.5 per cent), Baden-Württemberg (4.4 per cent), Île-de-France (4.4 per cent), South East England (6.7 per cent) and Stockholm (7.6 per cent).<sup>21</sup>

Given that the Basque provinces enjoy a special financial arrangement with the state,<sup>22</sup> regional fiscal imbalances with the Basque Country are more moderate, as examined below. In practice, the amount to be remitted by the Basque government has been based on a percentage of the difference between the national cost of the services not devolved to the region and the tax revenue not devolved by the central government, a curious concept that amounts to choosing a number somewhere between the region's income share and its population share – a percentage (6.24 per cent) that has not been updated since 1981. Finally, it appears that Madrid has benefited most from the “decentralised Spanish model”, due to the con-

**Figure 1**  
**Fiscal imbalance of Catalonia and the Basque Country vis-à-vis the rest of Spain**



Sources: J. Pons-i-Novell, R. Tremosa-i-Balcells: Macroeconomic effects of Catalan fiscal deficit with the Spanish state (2002-2010), in: *Applied Economics*, Vol. 37, No. 13, 2005, pp. 1455-1463; INE, Instituto de Estudios Fiscales, 2008.

centration of Spanish government investment and public expenditure in the capital. In 1998, some ten per cent of Spanish public capital stock was concentrated in Madrid.<sup>23</sup> Hence, the question that arises is that of identifying the net gainers and losers from the elimination of the existing mechanisms of fiscal territorial solidarity.

The empirical strategy followed in this paper lies in first computing the so-called “fiscal residuum”, namely the effect on regional mean income before and after clearing the fiscal regional imbalances in order to estimate the net effect of eliminating fiscal redistribution (with the sign inverted to allow a simpler empirical interpretation). We use data from 2005 on regional income (GDP), regional private consumption, public expenditure, and regional imports and exports. To compute the fiscal residuum, we first obtain an income multiplier from income, consumption and tax revenue data. Then we compute the fiscal residuum of each region in Spain as the expenditure that the state undertakes in each region minus the inter-territorial transfers.<sup>24</sup>

20 The central government collects 90 per cent of all Spanish taxes, while public expenditure is relatively decentralised: of the total Spanish public expenditure in 1998, 66 per cent came from the central government, 21 per cent from regional governments and 13 per cent from local governments.

21 J. Pons-i-Novell, R. Tremosa-i-Balcells: Macroeconomic effects of Catalan fiscal deficit with the Spanish state (2002-2010), in: *Applied Economics*, Vol. 37, No. 13, 2005, pp. 1455-1463.

22 This is due to a historical agreement that allows the Basque provinces to collect all taxes within their territory (except customs duties) and remit a share to the Spanish central government. This remittance depends in principle upon an estimate of the cost of services provided in the region by the central government.

23 J. Pons-i-Novell, R. Tremosa-i-Balcells, op. cit. The macroeconomic effects of this process have been quantified elsewhere, though a simple look at the data shows that between 1990 and 2005 Madrid experienced a progressive reduction in its share of Spanish GDP. In contrast, Figure 1 shows that the Basque Country's share of GDP did not fall significantly, despite its experience with terrorism.

24 See G. Brosio, F. Revelli, op. cit., for an application to Italy and Box 1 for a description of the methodology.

Table 1

**Estimated impact of elimination of fiscal residuum on Spanish regions' income, 2005**

	Gross mean income (before full decentralisation), millions of euros	Fiscal residuum, millions of euros	Income multiplier	Predicted mean income (after full decentralisation), millions of euros	Change in %
Andalusia	173,708	4,369.5	3.9	156,580	-10
Aragon	35,295	-171.7	2.6	35,744	1
Asturias	38,120	1,492.3	4.2	31,821	-17
Balearics	13,898	-1,062.5	2.6	16,674	20
Canary Islands	22,825	866.7	2.3	20,871	-9
Cantabria	14,252	-281.7	3.8	15,333	8
Castile-Leon	64,693	2,398.0	2.6	58,501	-10
Castile-La Mancha	38,757	1,313.7	2.7	35,155	-9
Catalonia	114,084	-20,085.5	2.1	156,541	37
Valencia	90,222	-5,328.6	2.8	105,265	17
Extremadura	34,461	1,907.3	4.2	26,529	-23
Galicia	70,812	2,291.2	2.7	64,621	-9
Madrid	107,791	2,092.8	2.0	103,696	-4
Murcia	20,694	194.9	2.2	20,266	-2
Navarre	11,778	-695.1	1.6	12,897	10
Basque Country	41,053	-3,434.4	2.1	48,196	17
La Rioja	6,637	-13.9	2.7	6,675	1

Sources: Instituto Nacional de Estadística, Contabilidad Regional de España, 2005.

The results of this exercise are presented in Table 1. We employ data from the National Statistics Institute and official government data for the year of the analysis. Fiscal tax and expenditure flows were either already regionalised (for expenditure) or were regionalised based on population flows. The ultimate goal of the empirical exercise is to estimate the effects on average income after clearing the fiscal residuum (assuming a linear taxation system and expenditure in the capital accruing only to the capital). Based on these estimates, Extremadura would exhibit an income loss of 23 per cent, Asturias 17 per cent and Andalucía and Castilla La Mancha about ten per cent. Even the region of Madrid would lose about four per cent of its GDP if regional expenses were assumed to benefit only people of the region. In contrast, the net gainers besides Catalonia (37 per cent) include Valencia (17 per cent), the Balearic Islands (20 per cent) and Navarra (17 per cent).

*Conclusion 1:* Eliminating fiscal redistribution in Spain could lead to GDP expansions or contractions of around 20-35 per cent in some regions. These results illustrate the magnitude of the distributional effects from reducing interregional fiscal solidarity. We draw upon these results in the following section to estimate how such a reduction would impact support for autonomy.

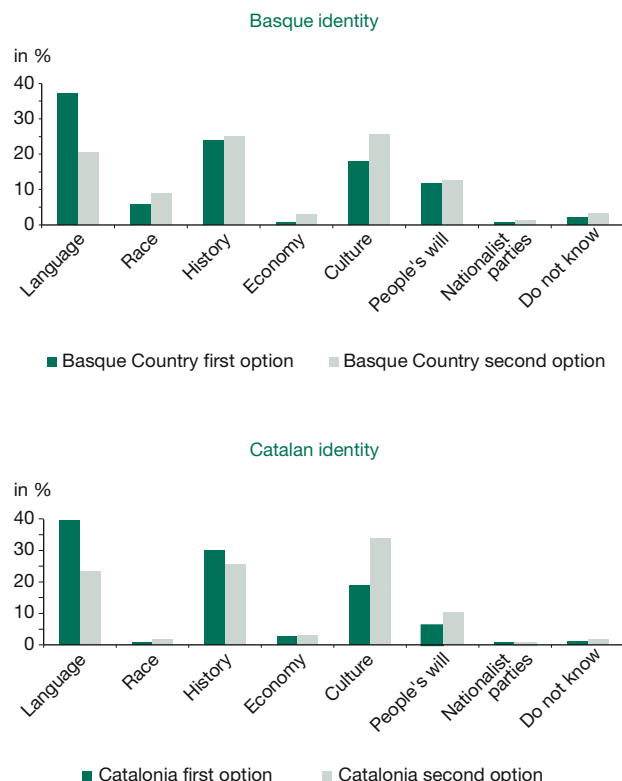
### The evolution of sub-central identity

Along with economic incentives, identity – both cultural and political – can be regarded as an important determinant of regional autonomy. Identity can act as a uniting factor that complements state institutional structures. Figure 2 displays survey evidence on the underpinning features defining the Catalan and Basque identities (using data from the Spanish Centre for Sociological Research). Interestingly, the three primary features are language, culture and, especially in the Basque Country, “democracy” or “participation”. While six per cent of Basques equate their identity with “race”, the percentage is negligible in Catalonia. .

Figure 3 plots the evolution of identity in Catalonia and the Basque Country from 1982 to 2007. Over the space of 25 years, perceptions of regional identity have evolved, consolidating and expanding in Catalonia and growing significantly in the Basque Country. This has taken place simultaneously with increasing immigration, mainly from Latin America and North Africa, which one would expect to increase ethnic heterogeneity. However, both in Catalonia and the Basque Country, we find that although shared identity remained relatively stable, identification with Spain steadily declined. More specifically, whilst 11 per



Figure 2  
Sources of spatial identity



Source: CIS, 2001.

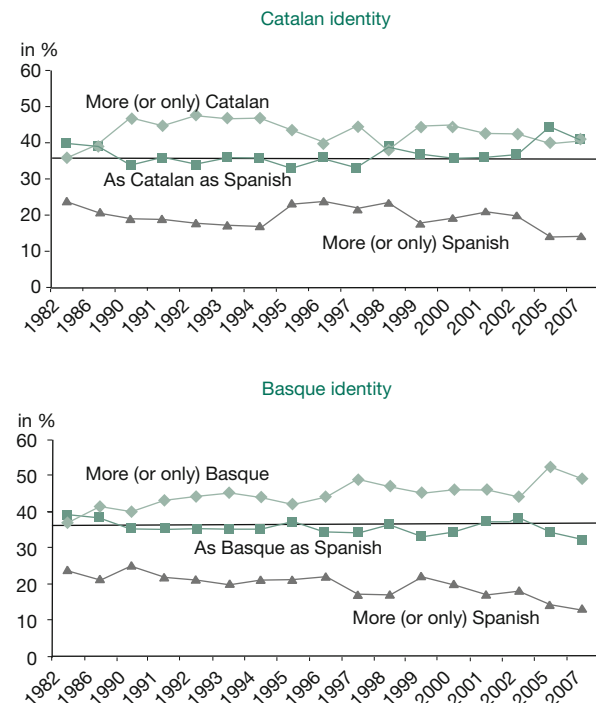
cent of Catalans defined themselves as only Catalan in 1982, this share increased steadily to 17 per cent in 2007. Although a plurality indicated a “dual identity” (about 41 per cent in 2007), it is hard to interpret given its “focal point” role as a “no choice” or “no conflict” option. Similar patterns are found among the Basques. Whilst 21 per cent perceived themselves to be only Basque in 1982, by 2007 the proportion had increased to about 29 per cent, and those perceiving themselves as more Basque than Spanish had increased from 16 to around 19 per cent. Identification as either Spanish or as more Spanish than Basque decreased from 24 per cent to about 15 per cent.

**Conclusion 2:** Both Catalan and Basque identities have expanded significantly since 1982. Both in Catalonia and in the Basque Country, sole identification with Spain has halved in just one generation.

### Support for regional autonomy

Previous research has tried to identify an empirical relationship between regional redistribution and identity as

Figure 3  
Identity in Catalonia and the Basque Country



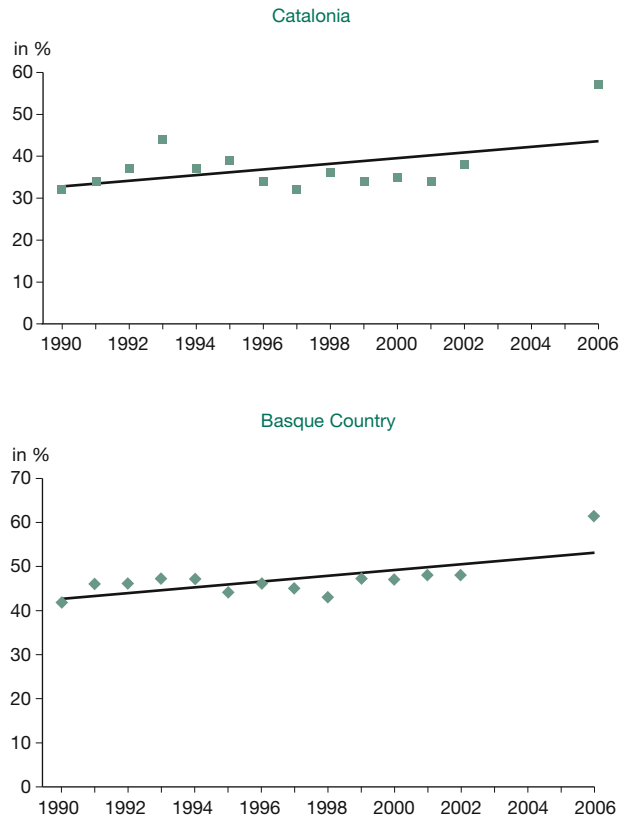
Question: Which of the following expresses your feeling of attachment? I am only Spanish, more Spanish than from my region, as from my region as Spanish, more from my region than Spanish, and only from my region.

Sources: CIS different issues (1982-2007).

triggers for further regional autonomy. One way of testing this claim is to examine the variables that explain the empirics of regional autonomy in the form of support for further devolution of state responsibilities to regions.<sup>25</sup> Figure 4 displays evidence on the patterns of support for different state institutional structures from 1990 to 2005. Interestingly, support for independence reaches 34 per cent in the Basque Country, whilst in Catalonia it remains just below 19 per cent. A large majority supports a federal state reform. Figure 4 also shows that from 1990 to 2006, the sense of attachment to a certain conception of Spain declined markedly, especially after 2002. Survey evidence from 2002 reveals that in both Catalonia and the Basque Country there were already high levels of dissatisfaction with their level of political autonomy: 61 per cent of Catalans and 53.4 per cent of Basques stated that they would like their political autonomy to increase.

<sup>25</sup> Note that this includes those who support regional independence alongside the setup of a federal or a confederal state (hence furthering existing regional autonomy).

Figure 4  
Support for a federal or independent state



Question: Here enclosed are a set of alternative organisational forms of the state in Spain. Please tell me which one you agree with. A sole state without autonomous communities, a state with autonomous communities as today, a federal state with more autonomy to the autonomous communities or a state with autonomous communities that can become independent states.

Sources: CIS different issues (1990-2006).

**Conclusion 3:** Existing regional autonomy failed to satisfy the majority of the Catalan and Basque populations, and support for institutional reform was already pressing in 2002.

Table 2 reports the results of a regression analysis (using a probit model; marginal effects are interpreted as coefficients) where the dependent variable is support for decentralisation ( $Y_{ij}$ ) in the form of a federal or independent state where regions have greater autonomy, and it is explained by changes in sub-central identity ( $RI_{ij}$ ), fiscal residuum ( $FR_{ij}$ ) for each individual  $i$  from each region  $j$ , and specific individual characteristics ( $\eta$ ). As a result, unobservable variables associated with regional imbalances might be picked up, although on the other hand, the heterogeneity resulting from seventeen regions in Spain makes the identification less problematic.

#### Box 1

##### Description of the methodology used

Following standard macroeconomic equivalence, internal income ( $Y$ ) and external imports ( $M = mY$ ) equal consumption ( $C = cY$ ), private investment ( $I$ ), public investment ( $G$ ) in Catalonia or the Basque Country ( $CATBAC$ ) and elsewhere in Spain ( $SPN$ ) along with exports ( $X$ ) as follows:

$$Y_i + M_i = C_i + I_i + G_i^{CATBAC} + G_i^{SPN} + X_i \quad (1)$$

Regional public investment is financed by own taxes, which depend on income ( $T^{CATBAC} = tY_i$ ), raised in Catalonia or the Basque Country, a percentage  $\alpha$  of centrally administered taxes raised in each region ( $T^{SPN}$ ) and transfers from the Spanish government to the region ( $TR^{SPN}$ ) and is calculated as follows:

$$G_i^{CATBAC} = T_i^{CATBAC} + \alpha T_i^{SPN} + TR_i^{SPN} \quad (2)$$

The fiscal residuum ( $FR$ ) is computed as the difference between public expenditure and transfers to the region and the total fiscal contribution of Catalonia or the Basque Country to the rest of Spain ( $(1 - \alpha) T_i^{SPN}$ ) as follows:

$$FR_i^{CATBAC} = G_i^{SPN} + TR_i^{SPN} - (1 - \alpha) T_i^{SPN} \quad (3)$$

Finally, inserting (3) and (2) into (1), we obtain a simple multiplier model where  $m$ ,  $c$ ,  $t$  are propensities to import and to consume, and  $t_i^{SPN}$  and  $t_i^{CATBAC}$  refer to average tax rates in Spain and Catalonia or the Basque Country respectively. Hence, it is possible to estimate the regional income forgone from regional redistribution by calculating the income differential between the status quo and a scenario where the fiscal residuum would be cleared ( $FR = 0$ ) as follows:

$$Y_i = \frac{1}{1 + m_i - c_i - t_i^{SPN} - t_i^{CATBAC}} (I_i + X_i + FR_i) \quad (4)$$

$$Y_{ij} = \beta RI_{ij} + \delta FR_{ij} + \eta_{ij} + \varepsilon_{ij} \quad (5)$$

To estimate this model, we use data from a survey designed by the Spanish Centre for Sociological Research containing rich information on sub-central identity records, nearly 10,000 observations and regional identifiers to impute data on fiscal imbalances as estimated in previous sections. The two treatment variables of the



**Table 2**  
**Support for a federal or independent state (probit model marginal effects), 2006**

	(1)	(2)	(3)	(4)
Identity	0.149* (0.005)	0.146* (0.005)	0.143* (0.005)	-
Fiscal residuum	0.01* (0.001)	-	-	0.02* (0.001)
Male	0.047* (0.009)	0.05* (0.009)	-	
Age (years)	-0.002* (0.0002)	-0.002* (0.0003)	-	
Higher education	0.07* (0.01)	0.11* (0.01)	-	
Higher education · Fiscal imbalance	0.03* (0.01)			
Pseudo R <sup>2</sup>	0.10	0.09	0.06	0.02
N	9515	9515	9914	9914
Likelihood ratio test Chi (2,8)	1189.67	953.4	737.87	224.54
Log likelihood	-5245.6	-5363.8	-5684.46	-5941.12

\* Significant at 1% level.

Source: Own calculations.

model are sub-central identity (measured on an intensity scale from 1 to 5) and exposure to territorial fiscal imbalance (measured by estimates of the fiscal imbalance in the same year, using the most conservative estimate). We consider three controls: age, gender and social status. We first report the full model with all the covariates together and including an interaction term between elites and fiscal imbalance, and then we examine the consistency of the two “treatment variables”, namely identity and fiscal imbalance (fiscal deficit) alone. We produce different estimates with a reduced form where all variables are included in the specification (1), only identity is included in the specifications (2)-(3) and only fiscal imbalances are included in the specification (4). Estimates refer to one year of data, although alternative specification pooling different years together exhibits similar results. However, given that not all variables are present in the database, we have chosen to present the specification with the richest number of controls.

Consistent with expectations, Table 2 suggests that both fiscal imbalance and sub-central identity are significant covariates and exert a robust effect on support for regional autonomy. However, the marginal effect of sub-central identity is seven times higher than that of the fiscal deficit, and doubling sub-central identity results in a 15 per cent increase in support for opting out. Overall, these results suggest that support for regional autonomy among the general public is primarily driven by identity or underly-

ing factors that correlate with identity. The other variable that exhibits a high coefficient is a dummy variable for the attainment of higher education by the respondent. We interact this variable with region-specific evidence on the fiscal residuum measured as described above. As hypothesised, our findings suggest that education exerts a filtering effect of redistribution preferences. Finally, controls suggest that support for regional autonomy is found to be larger among younger men.

*Conclusion 4:* Both regional redistribution and sub-central identity exert an influence on individuals’ support for regional autonomy, but the latter is overall more important in magnitude than the former. Support for regional autonomy is found to be stronger among more educated individuals.

## Discussion

This paper attempts to examine the correlates of support for regional autonomy and more specifically the effects of sub-central identity and fiscal redistribution. Although the type of data used here does not allow us to make causality claims, the specific empirical patterns of the two Spanish regions with strong claims for regional autonomy (Catalonia and the Basque Country) enable us to map the trends in sub-central identities and regional redistribution. In addition, they are indicative of the extent to which these trends correlate with support for regional autonomy. However, the results need to be interpreted with caution, given that they do not control for the potential effect of unobserved heterogeneity and the obvious limitation of referring to only one country.

Evidence suggests that demands for further self-government have risen significantly over the last two decades in the two regions examined. Such trends closely follow the rise in sub-central identity in both regions, and they specifically appear to correlate with the expansion of fiscal redistribution in Catalonia. Regression survey data analysis suggests that sub-central identity at the individual level correlates with increased support for regional autonomy in a far larger magnitude than a similar change in regional redistribution. Finally, support for regional autonomy appears to be higher among groups with higher education attainment. This suggests the existence of educational filtering effects.

From the European perspective, these results are consistent with the idea that identity plays a central role in the building of a European polity. In addition, targeting highly educated groups can help to garner support for the European project.