© OECD, 2002.

© Software: 1987-1996, Acrobat is a trademark of ADOBE.

All rights reserved. OECD grants you the right to use one copy of this Program for your personal use only. Unauthorised reproduction, lending, hiring, transmission or distribution of any data or software is prohibited. You must treat the Program and associated materials and any elements thereof like any other copyrighted material.

All requests should be made to:

Head of Publications Service,
OECD Publications Service,
2, rue André-Pascal,
75775 Paris Cedex 16, France.

© OCDE, 2002.

© Logiciel, 1987-1996, Acrobat, marque déposée d'ADOBE.

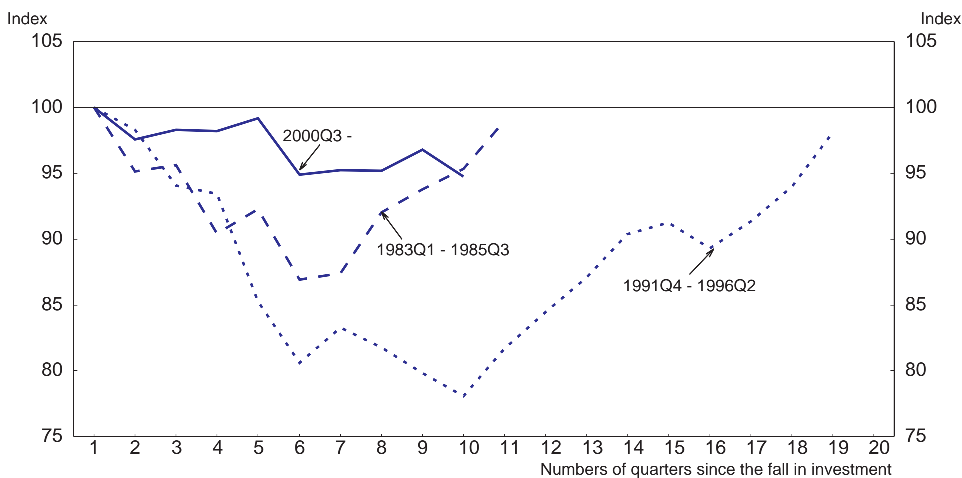
Tous droits du producteur et du propriétaire de ce produit sont réservés. L'OCDE autorise la reproduction d'un seul exemplaire de ce programme pour usage personnel et non commercial uniquement. Sauf autorisation, la duplication, la location, le prêt, l'utilisation de ce produit pour exécution publique sont interdits. Ce programme, les données y afférantes et d'autres éléments doivent donc être traités comme toute autre documentation sur laquelle s'exerce la protection par le droit d'auteur.

Les demandes sont à adresser au :

Chef du Service des Publications,
Service des Publications de l'OCDE,
2, rue André-Pascal,
75775 Paris Cedex 16, France.

Annex I
Supporting material

Figure A1. **Investment cycles**[1]



1. Investment in machinery and equipment.
Source: OECD.

© OECD 2003

© OECD 2003

Table A1. **Balance of payments**

Million euros

	1998	1999	2000	2001	2002 Q1	2002 Q2	2002 Q3
Trade balance	–18 480	–28 585	–37 778	–35 265	–25 136	–32 247	–36 650
(As a % of GDP)	–3.5	–5.1	–6.2	–5.4	–3.7	–4.7	–5.2
Non-factor services (excluding tourism)	–2 689	–3 726	–3 539	–2 833	–3 133	–1 494	–1 743
Tourism	22 315	25 250	27 782	29 971	20 377	29 124	37 506
Net investment income	–6 751	–8 904	–8 985	–10 655	–12 390	–10 387	–16 566
Net current transfers	3 006	2 853	1 528	1 836	8 937	–2 294	5 099
Current balance	–2 598	–13 112	–20 992	–16 947	–11 344	–17 299	–12 355
(As a % of GDP)	–0.5	–2.3	–3.4	–2.6	–1.7	–2.5	–1.8
Capital balance	5 680	6 552	5 181	5 556	6 967	8 959	7 652
Financial balance (net change)[1]	–105	15 800	21 300	18 827	22 644	14 185	15 797
Assets (net change)	67 162	84 367	139 732	66 740	61 296	120 635	52 390
Spanish investment abroad							
Direct	17 002	39 501	59 344	31 072	10 520	22 633	19 086
Portfolio and financial derivatives	41 521	43 816	63 025	49 185	46 339	55 105	14 913
Other investment[2] and reserve assets	8 639	1 051	17 363	–13 517	4 438	42 897	18 391
Liabilities (net change)	67 057	100 167	161 032	85 567	83 940	134 820	68 186
Foreign investment in Spain							
Direct[3]	10 592	14 791	40 728	24 340	27 776	15 826	11 829
Portfolio[4]	15 400	42 688	63 644	30 838	31 176	34 830	41 186
Other investment[2]	41 065	42 688	56 659	30 389	24 989	84 164	15 172
Errors and omissions (net)	–2 977	–4 682	–5 488	–7 436	–18 267	–5 845	–11 094
Memorandum items:							
Terms of trade, goods and services (% change)	0.0	–0.3	–2.2	2.1	–0.7	1.6	–0.2
As a % of GDP							
Foreign direct investment in Spain	2.0	2.6	6.7	3.7	4.1	2.3	1.7
Direct investment abroad	3.2	7.0	9.7	4.8	1.6	3.3	2.7
Net direct investment	1.2	4.4	3.1	1.0	–2.6	1.0	1.0

1. Changes in financial assets and liabilities are both net of repayments. Financial derivatives have been included in the change in financial assets although they are obtained as the balance of assets less liabilities.
2. Mainly loans, deposits and repo operations.
3. Does not include direct investment in listed shares but includes portfolio investment in non-listed shares.
4. Includes direct investment in listed shares but does not include portfolio investment in non-listed shares.

Source: Bank of Spain and OECD.

Table A2. **Inflation decomposition: comparison between Spain and the euro area**

Year-on-year percentage change

	Average 1994-99	2000	2001	2002[1]	2002 S2
A. Spain					
GDP deflator[2]	3.3	3.5	4.2	4.4	4.7
Labour cost[3]	2.6	3.7	4.2	4.3	4.3
Wages	3.3	3.7	4.1	4.3	4.5
Productivity	1.1	0.7	0.3	0.6	0.5
Employee ratio[4]	0.4	0.7	0.4	0.5	0.4
Net indirect taxes	6.9	3.9	1.9	2.3	3.1
Profits	3.4	3.1	4.8	5.1	5.5
Real wages	–0.1	0.6	0.8	0.7	0.7
B. Euro area					
GDP deflator[2]	2.0	1.3	2.4	2.3	2.2
Labour cost[3]	1.1	1.5	2.8	2.5	2.2
Wages	2.2	2.4	2.6	2.8	3.1
Productivity	1.4	1.2	0.0	0.4	0.9
Employee ratio[4]	0.2	0.4	0.3	0.2	0.0
Net indirect taxes	4.6	0.3	0.4	2.8	3.1
Profits	2.6	1.4	2.4	1.8	2.0
Real wages	0.0	0.2	0.2	0.7	0.9
C. Difference					
GDP deflator[2]	1.3	2.2	1.8	2.1	2.4
Labour cost[3]	1.5	2.2	1.3	1.7	2.1
Wages	1.0	1.4	1.5	1.5	1.4
Productivity	–0.2	–0.5	0.3	0.2	–0.4
Employee ratio[4]	0.2	0.3	0.1	0.4	0.3
Net indirect taxes	2.2	3.6	1.5	–0.5	–0.0
Profits	0.8	1.7	2.4	3.3	3.5
Real wages	–0.1	0.3	0.6	0.0	–0.2

1. OECD estimates.
2. The breakdown of inflation (measured by the GDP deflator) is obtained using the following accounting identity:

$$\frac{\text{GDP}}{\text{GDP volume}} = \frac{\text{Total compensation of employees}}{\text{GDP volume}} + \frac{\text{Net indirect taxes}}{\text{GDP volume}} + \frac{\text{Profits}}{\text{GDP volume}}$$

The first term represents the total labour cost in the economy, the second term represents the costs linked to net indirect taxes and the final term (defined as a residual of the identity) represents the contributions of profits and other revenues.
3. Wages less productivity plus the ratio of employees/total employment.
4. Ratio of employees to total employment.

Source: OECD calculations based on national accounts data.

© OECD 2003

© OECD 2003

Table A3. **Greenhouse gas emissions and sectoral indicators**

Annual average percentage change, 1990-99[1]

	Total level in 1999[2]	Total emissions	CO_2 emissions				Indicators per unit of GDP	
			Per kilowatt hour of electricity	Manufacturing, per unit of industrial production	Residential, per unit of private consumption	Road transport, per vehicle	Electricity use	Industrial output
Spain	**371**	**2.9**	**0.1**	**–1.5**	**1.9**	**–0.2**	**1.0**	**–0.4**
France	549	–0.1	–2.8	–1.5	–1.2	0.1	0.8	–0.2
Germany	994	–2.3	–2.2	–2.7	–5.0	–2.6	–1.7	–0.9
Greece	124	1.9	–1.7	–1.6	8.0	–1.1	1.8	–1.4
Italy	540	0.4	–1.6	–1.8	0.4	0.4	0.8	–0.4
Portugal	86	3.1	0.6	1.2	1.9	–0.4	2.0	–1.2
United Kingdom	647	–1.5	–4.7	–1.7	–0.7	–0.2	–0.7	–1.6
United States	6 830	1.2	0.2	–5.3	–2.3	1.1	–0.8	1.2
OECD[3]	14 257	0.5	–0.7	–3.1	–1.6	0.1	–0.3	0.1
OECD excluding USA[3]	7 428	0.0	–1.8	–2.0	–1.1	–0.6	0.0	–0.6
European Union	4 048	–0.4	–2.4	–2.2	–2.0	–0.6	–0.2	–0.5

1. 1990-98 for road transport CO_2 emissions. 1991-99 for German CO_2 emissions.
2. In million tonnes CO_2 equivalent.
3. The OECD total covers 27 countries.

Source: Greenhouse gas national submissions to the United Nations Framework Convention on Climate Change (UNFCCC), national sources and UNFCCC; carbon dioxide data from the International Energy Agency; industrial production and private consumption from OECD.

Annex II

The decentralisation and financing reform of autonomous communities and local authorities

With the transfer of health service provision to several autonomous communities in 2002, the decentralisation of the biggest spending items was complete, making Spain one of the most decentralised OECD countries (Table 10). The autonomous communities, created in 1979, now manage one-third of consolidated public expenditure and employ more than twice as many civil servants as central government (excluding social security). Health spending apart, the regions' main responsibilities concern the social services (excluding contributory pensions), active labour market policy, education, culture and some public infrastructure. This further decentralisation was accompanied by a reform of the financing method which had been in force since 1997 in 15 of the 17 communities subject to the common scheme.[1] The new system is designed, like its predecessor, to increase the regions' self-sufficiency and fiscal responsibility. It does, however, make good the main shortcomings of the previous system and its validity is not limited to five years, in contrast with the system in force up until now. It thus broadens the field of regional tax receipts and makes them more stable. Previously they were excessively dependent on fluctuations in personal income tax. More importantly, and in conjunction with the increased fiscal responsibility of the regions, the reform extended the communities' tax powers and abolishes the State guarantee which ensured that their main tax resource increased by at least as much as GDP.

The regional financing relies now mainly of fiscal revenues complemented by unconditional transfers. This system also includes a set of conditional transfers reinforcing the solidarity between communities. In order to set up this new financing system, the authorities began by calculating the needs of the communities as a whole, making a distinction between three types of expenditure: general purposes (including education), health and social services. The breakdown between the regions was determined on the basis of their demographic and geographic diversity and differences in per capita income in the base year (1999). In the case of medical services, minimum spending standards were set on the basis of the 1999 level and the future growth of the State's tax revenue. To finance the spending, which is determined as explained above, the regions now have tax revenues based on a broad basket of taxes including 35 per cent of VAT, one-third of the personal income tax and 40 per cent of the excise duties on alcoholic beverages, tobacco and fuel oils collected within their territory. The basket also includes taxes on electricity, on certain forms of transport and "retroceded" taxes (on wealth, inheritance and donations, gambling and stamp duties).[2] Total tax receipts account for some 65 per cent of the regions' resources, as against 29 per cent under the previous system. The State guarantee, ensuring a minimum increase in these receipts equal to that of nominal GDP, is now only temporary (up to 2004) and partial (applying only to additional resources linked to health-related responsibilities). On top of these resources, which are not earmarked, are transfers which safeguard solidarity between the

© OECD 2003

regions. These transfers are partly unconditional (*Fondo de Suficiencia*) and are designed to offset the discrepancy (positive or negative) between each Community's spending responsibilities and its fiscal revenues.[3] The regions also receive conditional transfers so that they can guarantee a minimum provision of health and education services throughout the territory (*Asignaciones de nivelación*) and correct regional economic imbalances (*Fondo de compensación interterritorial*). The share of these conditional transfers has been reduced to less than 2 per cent of total receipts, compared to about 45 per cent under the previous system.

The reform also extends the communities' powers with regard to most of the taxes they collect. This is true in particular of personal income tax, with the regions now free to amend the scales (as long as they do not touch the number of brackets and the tax remains equally progressive) and adjust the scale of housing-related tax allowances. This is also the case of wealth and inheritance taxes, with the Communities having total control over tax rates and extensive powers with regard to tax allowances. On the other hand, VAT and excise duties on tobacco, mineral oils and alcohol totally escape the Communities' powers because of the norms set by the European Union in this area and the inherent difficulties that different VAT rates inside a country would create. Regions can, however, adjust fuel oil taxes through the regional part of the Tax on Retail Sales of Certain Mineral Oils to finance environmental and public health programmes, as the Community of Madrid recently decided. They are also more closely involved in tax management, collecting certain taxes directly (special taxes on fuel oils and transport) and taking part in the management of those they do not collect but which have an impact on their resources.

As mentioned in the main text, by the way it has been organised, decentralisation to the regions has the potential to improve the incentives for greater efficiency in public finance management, while maintaining sound fiscal control through the simultaneous application of the fiscal stability law. However, the efficiency gains would be strengthened by a widening of the use of benchmarking and a public management more oriented towards the outputs or outcomes and with greater co-ordination among regions. It is also important to recognise that, despite the planned equalisation mechanisms, it is difficult to predict the impact on trends in wealth differentials between regions with the introduction of extensive tax competition with a tax-sharing system. All in all, in view of the complexity of the new system and the uncertainty surrounding its actual use, a mechanism for assessing the reform ought to be programmed within a few years' time in order to correct any possible defects in its application.

Following decentralisation to the Communities, a reform of the local authority financing system was also launched. This is warranted for two main reasons: first, the need, in the wake of the adoption of the fiscal stability law, to increase the municipalities' fiscal responsibility, as was done in the case of the communities; second, the need to remedy certain shortcomings in the local taxation system. The three main local taxes, which affect real estate, business activity and motor vehicles, have rigid tax bases, which often depend on administrative decisions that make them costly to manage. Moreover, the tax on business activities (IAE) affects companies without taking account of their income or wealth, poses equity problems and affects incentives to recruit and invest.[4] To remedy these difficulties, a reform has been adopted which will be implemented progressively in 2003-04. It abolishes the IAE for about 95 per cent of taxpayers by exempting small firms and individual carrying out professional or economic activities (with total net turnover of less than EUR 1 million) and those recently set up. Local taxation, over which the municipalities will have more extensive powers, is also being modernised: the incentives that are unfavourable towards employment for firms still liable to the IAE are to be abolished; in fact, the reduction in the IAE on small firms is partly offset by an increase in this tax which is now levied on the incomes of large and medium-sized companies; the municipalities will have more leeway to differentiate between the property tax applying to firms and to households, reduce that imposed on large families and

© OECD 2003

increase that applying to vacant housing; by applying tax exemptions, they will also be able to encourage the production and use of the least polluting forms of renewable energy. Lastly, local authorities' resources, which will be at least equal to those currently at their disposal, in the case of municipalities with fewer than 75 000 inhabitants, will be supplemented by the transfer of part of State taxes (income tax, VAT and excise duties) and additional transfers linked to the rise in central government tax revenues.[5]

Apart from reforming local authority financing, discussions have also started on reforming their responsibilities (*Pacto local*). The share of municipality spending in total public expenditure, which has remained stable at between 13 and 15 per cent for 20 years, is smaller than in other OECD countries, including federal countries, which has prompted calls for these authorities' powers to be stepped up (Table 10). It is important to realise, however, that there are advantages and drawbacks to extending their powers. While perhaps desirable, increasing local powers involves identifying those areas which might generate efficiency gains without impairing budgetary control. An international comparison shows that local authorities in Spain account for a share of education, health and welfare spending that is smaller than the OECD average (Table A4). However, a detailed assessment of both the benefits and also the costs involved in any transfer of responsibility is necessary because of the possible losses of scale economies or the existence of geographic externalities (spillover effects). Local authorities in Spain are numerous (8 000) and small in size (85 per cent of municipalities have fewer than 5 000 inhabitants). Without a high degree of inter-communal co-operation, many cannot take on the responsibility of providing services with high fixed costs or requiring specialised staff. Also, decentralising certain services such as health care and social services could cause problems relating to co-ordination with other policies such as hospital management or active labour market policy which will no doubt continue to be regionally administered for scale economies reasons. Decentralising basic education provision to the local level would no doubt cause fewer difficulties, and it would enable municipalities to better take into account the specific needs and preferences of the population and would encourage innovation in educational methods. In view of the centralised management

Table A4. **Local governments' expenditure by function**

In per cent of total local governments' expenditure

	Education	Health	Social security and welfare	Housing and community amenities	Total
Spain (1997)	**4.2**	**2.6**	**4.9**	**22.7**	**34.5**
Canada (2000)	41.6	1.2	7.3	5.5	55.6
Denmark (2000)	12.3	16.1	57.5	0.9	86.8
France (1993)	19.6	2.3	17.7	24.1	63.7
Germany (1996)	13.0	14.5	24.6	15.3	67.4
Ireland (1997)	11.3	45.5	5.2	14.9	76.8
Netherlands (1997)[1]	17.9	2.6	22.6	20.0	63.1
Switzerland (1999)	22.8	18.3	14.7	8.4	64.2
United Kingdom (1998)	28.7	0.0	32.5	5.4	66.7
United States (1999)	43.9	8.7	7.6	2.3	62.5
Non-weighted average	23.5	12.1	21.1	10.7	67.4

1. Provincial and local governments.
Source: IMF, *Government Finance Statistics Yearbook*, 2001.

© OECD 2003

of curricula in Spain, decentralising basic education would not discourage labour mobility.[6] It could, however, give rise to equity problems between wealthy and less wealthy authorities, which would need to be resolved. Decentralising this competence, which is currently covered by the Communities, would also necessitate an equivalent transfer of resources in order to guarantee the local authorities' financial self-sufficiency.

Notes

1. The last two regions, the Basque Country and Navarra, are covered by a specific financing system (OECD, 2000) which the reform has barely altered. The system was extended indefinitely.
2. The communities may also raise taxes and user charges on regional utilities.
3. The amount of transfers received or disbursed by the communities was set for the base year 1999. The increase in these transfers in future years will be linked to the total tax receipts of central government (the case of transfers received by one region) or regional government (if the transfers are paid by the region).
4. The IAE is the second most important municipality tax, representing 20 per cent of local tax receipts (0.3 per cent of GDP) and affecting all companies, whether or not they are making profits. It is based on fixed elements such as the number of employees, the size of the municipality and the surface area of the premises. Its parameters vary according to the type of activity and their location (including in the same town). It depends little on economic activity (Poveda and Sánchez, 2002).
5. Small municipalities will be financed by their own tax receipts and by State transfers allocated on the basis of their population size, tax effort and taxation possibilities.
6. There will be *a priori* no obstacle to the geographic mobility of people because their children can continue the same curriculum in another region.

© OECD 2003

Annex III

Main measures of the personal income tax reform

- The number of tax brackets is reduced from 6 to 5. The top marginal rate is set now at 45 per cent (previously 48 per cent), and the lowest rate at 15 per cent (previously 18 per cent).
- The general tax allowance for net labour income, which is based on a non-linear formula, is raised by 16.67 per cent for those who earn less than EUR 8 200 per year, and by 6.6 per cent for those who earn more than EUR 13 000.
- To encourage participation of older workers, the general income allowance will be doubled for those older than 65 who continue working.
- In order to foster mobility of unemployed workers, the general net labour income allowance will be doubled during two years for those unemployed who accept a job in a different municipality.
- Mothers who work will receive a tax rebate of EUR 100 per month during three years from the moment a new child is born or adopted. This rebate can also be received in advance in monthly payments.
- The flat rate for capital gains is reduced from 18 to 15 per cent, in line with the reduction of the lowest marginal rate.
- The deduction for labour income, income from economic activities and income on capital held for more than two years is raised from 30 to 40 per cent.
- To foster competition among mutual funds, capital gains from such investments will not be taxed when changing funds.
- The ceiling of tax-exempted contributions to private pension funds is raised by 11 per cent (to EUR 8 000 per year).
- Contributions to a new type of insurance contract (*Planes de previsión asegurados*) that provide pension income at a guaranteed interest rate will also be tax-exempted up to EUR 8 000 per year.
- To favour the supply of rental housing, a new tax allowance of 50 per cent of net rental income for owners who offer residential dwellings for rent is introduced. There will be deductions for all types of expenses (including 3 per cent for depreciation).
- The special regime for small self-employed and unincorporated businesses (*sistema de módulos*), which is based on special parameters rather than on profits, is subject to the respect of two new conditions. Businesses whose purchases of intermediate goods are above the threshold of 300 000 euros per year, or those whose activity falls outside the geographic application of the tax (exporters and importers), will not benefit from this special regime.

© OECD 2003

– Family allowances are raised, and extended to new family situations. Deductions for children range from EUR 1 400 per year for the first child to EUR 2 300 for the fourth, while the additional reduction for children younger than 3 is four folded (to EUR 1 200). The deduction for old-age dependants is raised by 33 per cent if they are older than 65, and a new reduction of EUR 1 000 is introduced for social care, without the need of justifying the expenses. Tax allowances for the disabled are also raised.
– Several measures are introduced to facilitate tax filing and the calculation of withholding tax.

© OECD 2003

Annex IV

Rental supply and demand incentives

The existence of an adequate rental market depends on the incentives affecting household demand, *i.e.* relative rental costs compared with the costs of buying a home, and also on the supply of these housing services, *i.e.* the return on rental investment as compared with alternatives, *e.g.* financial investment. To show what role these incentives play in the case of Spain, a small model has been built to calculate the effect of a decision to rent rather than buy one's home on household wealth. The model compares the amount of assets accumulated by a household depending on the housing solution it opts for.

The model developed for this analysis relies on the following assumptions:*

- *Characteristics of the house purchased*: the price of the house considered amounts to EUR 96 162, corresponding to a medium-category house. In addition, real property prices are assumed to rise by 2 per cent per year, which is close to its trend since 1990.
- *House purchase conditions*: it is assumed that the buyer borrows the total amount of capital required to acquire the house, including the costs and taxes associated with the transaction, which are estimated at 9 per cent of the house price. To simplify the analysis, the buyer is supposed to take out a fixed-interest rate loan, with a nominal rate of 5½ per cent or 3½ per cent in real terms.
- *Rental conditions*: initially, the level of the rent is set such that the rate of return on rental investment is the same as for alternative forms of investment, *e.g.* financial investment, with a return of 5 per cent (3 per cent in real terms). The annual rent level is hence set at EUR 4 800 the first year. It is indexed on inflation, which is supposed to rise by an annual rate of 2 per cent during the following years.

In the case of a household buying a home, the value of its wealth in a given year is calculated as the difference between the sales price of the property and the capital still to be repaid. This estimated wealth takes into account the cost related to anticipated repayment of the capital borrowed (estimated at 2 per cent of its value). It also includes the cumulative amount of tax relief attached to the purchase. These aids, which are granted without any means test, with a ceiling of EUR 1 803, decrease after two years, falling to EUR 1 578 from the third year onwards. In the case considered, the tax relief attached to house purchased represents 97 per cent of the ceilings.

In the case of a household renting a home, its wealth is calculated as its stock of saving, assuming that the household systematically invests on the financial market, the surplus being equal to the difference between the rent paid and the costs if it had bought. These costs include loan repayments but also the property tax (IBI, based on a cadastral value representing half of the actual value of the house and an average tax rate of 1 per cent). The nominal rate of return

* A comparable analysis to the one carried out here is presented in San Martín (2000), with similar conclusions.

© OECD 2003

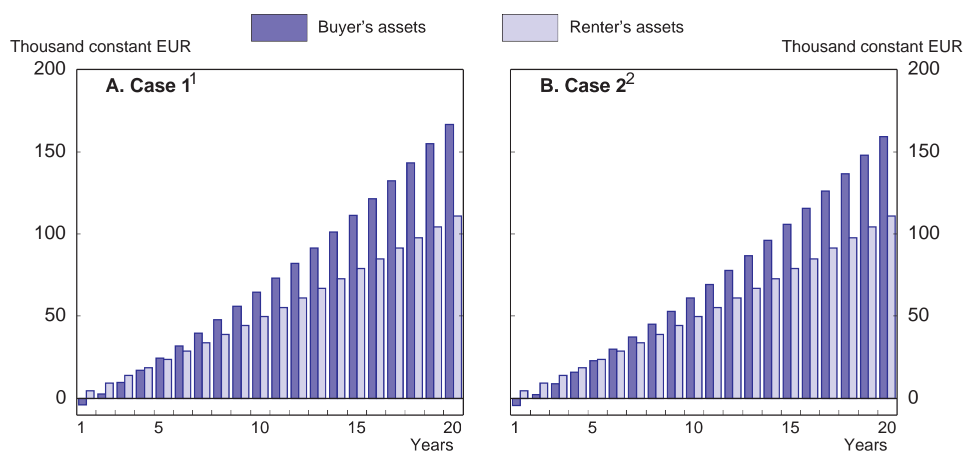
of this saving is assumed to be 5 per cent, while account is taken of the tax on the lessee's income from saving (15 per cent) and the index-linking of rents.

As indicated in the main text, buying one's home is a much better option than renting if the average rental price provides a return comparable to that on financial investments. The assets built up by the buyer exceed those of the lessee by the third year and are on average 50 per cent greater on a discounted basis (with an actualisation rate of 3 per cent, Figure 21). The higher the rate of inflation, the greater the incentive to buy because of the decline in the real cost of repaying the loan, whereas rents are index-linked. With a 3 per cent inflation rate, the average difference between the buyer's assets and the lessee's reaches 70 per cent on a discounted basis. Moreover, if the real housing prices increase by 1 percentage point to 3 per cent a year, the wealth gap between the buyer and the lessee rise by 10 percentage points to 60 per cent. On the other hand, if the cost of the property increases, incentives to buy are smaller because tax relief is capped.

The lack of incentives for rental demand is likely to induce a reduction in rental prices. With a trend rise in property prices and tax allowances in favour of owners, a 40 per cent fall in rents is needed to achieve equilibrium between the incentives to rent and to buy one's home implying a stronger rental demand. However, that sort of fall in rents would imply a considerable decline in the return on rental investment compared with alternative forms of investment, and this would prevent the expansion of rental supply. Recent tax incentives granted to lessees included in the 2003 personal income tax reform aims at strengthening the profitability of rental house investments, which is limited by relatively low rents.

If expectations as to real property prices could be stabilised, the advantage of buying rather than renting accommodation would decline because of the narrowing of the difference between the value of the buyer's cumulative assets and those of the lessee. In this case, the buyer's assets exceed the lessee's as of the sixth year and the average differential in favour of the buyer is close to 20 per cent (Figure A2). Eliminating the tax allowances encouraging

Figure A2. **Wealth developments linked to housing purchase/rental**



1. No tax subsidies for the buyer and an annual appreciation of the property of 2% in real terms.
2. Tax subsidies for the buyer and no appreciation of the property in real terms.
Source: OECD.

© OECD 2003

the purchase of property, would also reduce the incentives in favour of home purchasing. The buyer's assets exceed the lessee's as of the fourth year and the average differential in favour of the buyer is close to 30 per cent (Figure A2).

Abolishing tax allowances encouraging the purchase of property, coupled with the stabilisation of expectations as regards real property prices, would balance the incentives to buy and to rent accommodation, while at the same time maintaining attractive returns on rental investment. In this case, the buyer's cumulative assets would not exceed those of the lessee until the fourteenth year and the differential in favour of buying would on average be eliminated over the period as a whole (Figure 21).

© OECD 2003

Annex V

The effect of employment shifts on labour productivity growth and the contribution of immigration of non-EU foreigners

Methodology

The growth accounting exercise is based on the following equation, where Y is GDP, L total employment, and L_i employment in sector i:

$$(Y/L)^t = \sum_i (Y_i/L_i)^t * (L_i/L)^t$$

or $P^t = \sum_i P_i^t * S_i^t$,

where P is productivity and S_i the share of sector i in total employment.

The change in productivity over n periods can be decomposed as:

$$\begin{aligned} P^t - P^{t-n} &= \sum_i P_i^t * S_i^t - \sum_i P_i^{t-n} * S_i^{t-n} \\ &= \sum_i \left(P_i^t - P_i^{t-n}\right) * S_i^{t-n} + \sum_i P_i^t * S_i^t - \sum_i P_i^t * S_i^{t-n} \\ &= \sum_i \left(P_i^t - P_i^{t-n}\right) * S_i^{t-n} + \sum_i P_i^t * \left(S_i^t - S_i^{t-n}\right) \end{aligned}$$

The first term of the last line represents the contribution of individual sectors' labour productivity growth to total labour productivity (the "within" effect), and the second term measures the contribution of shifts in employment shares among sectors with differing productivity levels. The effect of immigration can then be isolated by calculating what would have been the changes in employment shares with no immigration.

Data and assumptions

The period considered runs from the first quarter of 1995 to the second quarter of 2002. GDP at constant 1995 prices and employment from the national accounts were used to calculate the level of productivity per full-time equivalent job.

The sectors considered are the following: agriculture, energy, industry, construction, low productivity services where immigrants often work (trade and repair, hotels and restaurants, domestic services) and other services.

Non-EU foreign employment is taken from the work permit statistics for 1995 and from the social security registers for 2002 (checking that the two sources did not significantly differ

© OECD 2003

in periods where both are available, *i.e.* 1999 and 2000). From these data, the change in sectoral shares attributable to immigration was calculated, and applied to the national account employment figures. Table A5 displays some of the data and the results.

Shifts in sectoral employment are estimated to have slowed down labour productivity growth by about 0.23 percentage points per year. If there had been no immigration between 1995 and 2002, the shift effect would have been negligible, *i.e.* annual labour productivity growth would have declined by only 0.02 percentage point.

© OECD 2003

© OECD 2003

Table A5. **The effect of employment shifts on labour productivity growth and the contribution of immigration**

1995 – Q2 2002

		Total	Agriculture	Energy	Industry	Construction	Services with immigration	Other services
Productivity level in 1995	(1)	8.4	8.4	32.3	8.6	7.0	6.6	9.8
Change in productivity level 1995-2002	(2)	0.4	0.9	16.6	0.3	–0.3	0.2	0.4
Employment share in 1995	(3)	100	8.0	1.1	18.5	9.4	24.6	38.4
Change in employment share 1995-2002	(4)	0	–1.9	–0.3	–0.3	1.8	0.9	–0.3
Change in employment share without immigration	(5)	0	–2.1	–0.1	–0.1	1.8	0.6	–0.2
Within effect	= (3) * (2)	0.49	0.07	0.18	0.05	–0.03	0.05	0.17
Shift effect	= (1 + 2) * (4)	–0.13	–0.11	–0.15	–0.02	0.12	0.06	–0.03
Shift effect without immigration	= (1 + 2) * (5)	–0.01	–0.12	–0.03	–0.01	0.12	0.04	–0.02
Shift effect in annual percentage point of labour productivity growth		–0.23						
Shift effect without immigration in annual percentage point of labour productivity growth		–0.02						

Source: OECD calculations based on national accounts, social security registry and work permits to foreigners.

Annex VI

Calendar of main economic events

2001

May

The ECB cuts interest rates by 0.25 points to 4.5 per cent.

July

The University Law is approved by the government.

August

The ECB cuts interest rates by 0.25 points to 4.25 per cent.

September

After the September 11 attacks in New York, the ECB lowers its key interest rate by 0.5 points to 3.75 per cent.

October

Gas liberalisation continues with the partial sale of the natural gas contract with Algeria's Sonatrach to competitors of the incumbent operator, Gas Natural.

November

The ECB lowers its key interest rate by 0.5 points to 3.25 per cent.

December

The government issues a decree allowing for retirement after age 65 and introducing some incentives to postpone retirement.

© OECD 2003

2002

January

The 2002 budget enters into force, accompanied by a new financial regime for autonomous communities. The tax powers of the regions are widened, while the transfer of competencies on health policy is finished.

March

The EU summit of Barcelona approves, among other measures, investment in cross-frontier interconnections of the electricity network.

April

The CMT imposes a reduction of the lease price of the local loop on Telefónica.

May

A decree is issued that reforms the unemployment insurance system. It includes a clarification of eligibility conditions for receiving benefits, a phasing out of the special unemployment subsidies for temporary agricultural workers in Andalusia and Extremadura and the suppression of the payment of wages between a lay-off and the tribunal decision on its adequacy.

The two Satellite TV companies, *Sogecable* and *Vía Digital*, announce their intention to merge.

July

The prime minister appoints a new government.

The Law on Education Quality is approved by the government.

Publication of the new census, which puts the Spanish population at 40.8 million, 2 million more than in the previous census of 1991.

September

The government announces a package of measures for improving competition in telecommunications, including a modification of the price cap of Telefónica.

October

Some elements of the unemployment insurance reform of March are modified, softening the eligibility conditions for benefits.

The *Prestige* oil tanker sinks off the Galician coast.

November

The Financial Law is approved by Parliament, affecting a wide range of issues such as accountancy and transparency rules for firms and regulation of savings banks.

A reform of the financing system of municipalities is launched by the government, including the suppression of the tax for business activities (IAE) for small firms.

© OECD 2003

The government issues, for approval, a draft law on co-ordination and quality of the health system.

December

The ECB lowers its key interest rate by 0.5 points to 2.75 per cent.

The EU Economic Council approves a reform of the Common Fisheries Policy.

The budget for 2003 is approved, including a reform of the personal income tax which reduces marginal rates, increases some tax allowances and introduces incentives to seek work for some groups of workers.

A new method for calculating electricity tariffs is approved by the government, which should provide a stable framework until 2010.

2003

January

The final stage of the liberalisation of electricity and gas markets enters into force, with choice of provider for all consumers.

The Budget Stability Law enters into force.

The reform of the special regime for agricultural workers of March is complemented with transition benefits during six years for those who cannot enter the system.

A national wage agreement is reached for 2003 between the social partners, recommending wage increases of 3.1 per cent.

March

A new law for "Health Co-ordination and Quality" was approved by the Parliament.

© OECD 2003

Glossary of acronyms

ADSL	Asymmetric digital subscriber line
ALMP	Active labour market policy
BBVA	*Banco Bilbao Vizcaya Argentaria*
BIS	Bank for International Settlements
CAP	Common agricultural policy
CES	*Consejo Económico y Social* (Economic and social council)
CLH	Transportation monopoly
CMT	*Comisión del Mercado de las Telecomunicaciones* (telecommunications sector regulator)
CPI	Consumer price index
EC	European Commission
ECB	European Central Bank
EMU	European Monetary Union
EPA	Labour force survey
ESA	European System of Integrated Economic Accounts
EU	European Union
EUR	Euro
Eurostat	European Union Statistical Institute
FAO	Food and Agricultural Organisation
FORCEM	Foundation for the training of workers
GDP	Gross domestic product
GHG	Greenhouse gas
GRECO	*Programa Global de Regulación y Coordinación de la Extranjería y la Inmigración en Espãna* (Global Programme to Regulate and Co-ordinate Foreign Residents' Affairs and Immigration in Spain)
IAE	*Impuesto de actividades económicas* (tax on business activities)
IEA	International Energy Agency
IBI	*Impuesto sobre bienes inmuebles* (real estate tax)
ICAC	*Instituto de Contabilidad y Auditoría de Cuentas* (Institute for Accounting and Auditing)
ICES	International Council for the Exploration of the Sea
ICID	International Commission on Irrigation and Drainage
ICT	Information and Communication Technology
IMF	International Monetary Fund
IMSERSO	*Instituto de Inmigración y Servicios Sociales* (national agency for migration and social services)
INE	*Instituto Nacional de Estadística* (National Statistics Institute)
INEM	*Instituto Nacional de Empleo* (National Agency for Employment)

© OECD 2003

INSALUD	*Instituto Nacional de la Salud* (National Health Institute)
NAIRU	Non-accelerating inflation rate of unemployment
NGO	Non-governmental organisation
OPA	*Oferta pública de adquisición* (take-over bid)
PER	*Plan de Empleo Rural* (special unemployment and investment regime for seasonal agricultural workers in Andalusia and Extremadura)
PES	Public employment service
PISA	Programme for International Student Assessment
PPP	Purchasing power parity
R&D	Research and Development
SCP	Stability and Convergence Programmes
SDC	*Servicio de Defensa de la Competencia* (Competition Service)
SME	Small and medium-sized enterprise
TDC	*Tribunal de Defensa de la Competencia* (Competition Tribunal)
UA	Unemployment assistance
UI	Unemployment insurance
UMTS	Universal Mobile Telephone Systems (third generation mobile telephone systems)
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
VAT	Value added tax

© OECD 2003

Bibliography

Albiac-Murillo, J., J. Tapia-Barcones, A. Meyer, and J. Uche (2002),
"Water Demand Mangement *versus* Water Supply Policy: the Ebro River Water Transfer", *World Bank Water Forum*, May 6-8, Washington, D.C.

Álvarez-Llorente, G. (2002),
"Decisiones de fecundidad y participación laboral de la mujer en España", *Investigaciones Económicas*, Vol. XXVI(1).

Aparicio, R. and A. Tornos (2000),
La inmigración y la economía española, Ministry of Labour and Social Affairs, Madrid.

Balmaseda, M., I. San Martín and M. Sebastián (2002),
"Una aproximación cuantitativa a la 'burbuja' inmobiliaria", *Situación Inmobiliaria*, BBVA, December , Bilbao.

BBVA (2002a),
Informe Económico 2001.

BBVA (2002b),
Situación Inmobiliaria, July, Bilbao.

Bank of Spain (2001),
Annual Report.

Bank of Spain (2002a),
Boletín Económico, September.

Bank of Spain (2002b),
Boletín Económico, October.

Bank of Spain (2002c),
Estabilidad Financiera, No. 3, November.

Beaufoy, G. (2000),
"The Environmental Impact of Olive Oil Production in the European Union: Practical Options for Improving the Environmental Impact", report of the European Forum on Nature Conservation and Pastoralism and the Asociación para el Análisis y Reforma de la Política Agro-rural.

Bentolila, S. and J.F. Jimeno (2002),
"La reforma de la negociación colectiva en España", *Working Paper*, FEDEA, January.

Blanchard, O. (2001),
"Country Adjustments Within Euroland. Lessons After Two Years", *Defining a Macroeconomic Framework for the Euro Area. Monitoring the European Central Bank* 3, Centre for Economic Policy Research (CEPR), London, March.

© OECD 2003

Blondal, S., S. Field and N. Girouard (2002),
"Investment in Human Capital Through Post-Compulsory Education and Training: Selected Efficiency and Equity Aspects", OECD *Economics Department Working Papers*, No. 333.

Borjas, G. (2002),
"The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market", paper presented at the European Association of Labour Economics (EALE) Conference in Paris, 19-22 September.

Bover, O., M. Arellano and S. Bentolila (1996),
"Duración del desempleo, duración de las prestaciones y ciclo económico", *Economic Studies*, No. 57, Bank of Spain.

Bricall, J.M. *et al.* (2000),
"Informe Universidad 2000", report published by the Conferencia de Rectores de las Universidades Españoles (CRUE), March.

Brücker, H. *et al.* (2001),
"Managing Migration in the European Welfare State", paper presented at the third European Conference of the Fondazione Rodolfo DeBenedetti in Trieste on 23 June.

Caixa (2002),
"Special Reports", *The Spanish Economy: Monthly Report*, Caixa Research Department, October.

Calmfors, L. (1993),
"Centralisation of Wage Bargaining and Economic Performance: A Survey", OECD *Economics Department Working Papers*, No. 131.

Calmfors, L. and J. Driffil (1988),
"Bargaining Structure, Corporatism and Macroeconomic Performance", *Economic Policy*, Oxford, Blackwell Publishers, April.

Canadian Tourism Commission (2002),
Role of the Internet in the Vacation Travel of North Americans – Summary of Findings, Research Report, 2002-7.

Capros, P. and L. Mantzos (2000),
"The Economic Effects of EU-Wide Industry-Level Emission Trading to Reduce Greenhouse Gases: Results from the PRIMES Energy Systems Model", National Technical University of Athens.

Carrasco, C. (1999),
Mercados de trabajo: Los inmigrantes económicos.

CIEMAT (1997),
ExternE National Implementation: Spain.

CIHEAM (2001),
Development and Agri-Food Policies in the Mediterranean Region, Annual Report.

Colectivo IOÉ (1998),
Inmigración y trabajo – Trabajadores inmigrantes en el sector de la construcción, Colección Observatorio Permanente de la Inmigración, Ministry of Labour and Social Affairs, Madrid.

Colectivo IOÉ (1999),
Inmigración y trabajo en España – Trabajadores inmigrantes en el sector de la hosteleria, Colección Observatorio Permanente de la Inmigración, Ministry of Labour and Social Affairs, Madrid.

© OECD 2003

Collado, D., I. Iturbe-Ormaetxe and G. Valera (2002),
"Quantifying the Impact of Immigration on the Spanish State", IVIE *Working Paper*, No. 2002-04, March.

CES (2002),
"La emancipación de los jóvenes y la situación de la vivienda en España", *Colección Informes*, 3/2002, Economic and Social Council.

Cuesta Azofra, M., C. M. S. Pardi Ruíz, T. Nuñez, I. Galvin and M. C. Martínez Alvarez (2000),
"La escolarización de los hijos de inmigrantes en España", *Cuadernos de Información Sindical*, CC. OO, November.

De Ayala Cañón, L., R. Martínez López and J. Ruiz-Huerta (2001),
"La descentralización territorial de las prestaciones asistenciales: effectos sobre la igualdad", *Papeles de Trabajo del Instituto de Estudios Fiscales*, No. 16/01, *www.minhac.es/ief/publicaciones/papelest/01/pt_16_01.pdf*

Defensor del Pueblo Andaluz (2001),
"El alojamiento y la vivienda de los trabajadores immigrantes en el poniente almeriense y campo de Níjar", *Informe especial al Parlamento de Andalucía*, February.

Dolado, J. J. (2002),
"Los nuevos fenómenos migratorios: retos y políticas", mimeo, January.

Dolado, J.J., C. García-Serrano and J.F. Jimeno (2001),
"Drawing Lessons from the Boom of Temporary Jobs in Spain", *Working Papers*, 2001-11, FEDEA, July.

Dolado, J. J., J. F. Jimeno and R. Dulce (1996),
"The Effects of Migration on the Relative Demand of Skilled Versus Unskilled Labour: Evidence from Spain", CEPR *Discussion Paper*, No. 1476, September.

Dustmann, C. and F. Fabbri (2000),
"Language Proficiency and Labour Market Performance of Immigrants in the UK", IZA *Discussion Papers*, 156, May.

Eguía, B. and C.A. Echevarría (2001),
"Estructura de edad poblacional e inversión residencial en España", *Estudios sobre la Economía Española*, FEDEA, 119, November.

Estrada, A. and J.D. López-Salido (2001a),
"Accounting for Spanish Productivity Growth Using Sectoral Data: New Evidence", *Working Paper*, No. 0110, Bank of Spain.

Estrada, A. and J.D. López-Salido (2001b),
"Sectoral and Aggregate Technology Growth in Spain", *Working Paper*, No. 0116, Bank of Spain.

Estrada, A. and J.D. López-Salido (2002),
"Understanding Spanish Dual Inflation", *Working Paper*, No. 0205, Bank of Spain.

Eunomia Research and Consulting (2002),
"Economic Analysis of Options For Managing Biodegradable Municipal Waste" *Final Report* to the European Commission, Bristol UK.

Euroconstruct (2001),
The Prospective Construction in Europe.

European Commission (2002),
"Comments on the Strategic Environmental Assessment of the Ebro River Water Transfer", ENV.B1/MMA/ip/D(2002).310613, mimeo, May.

© OECD 2003

Faini, R. (2001),
"Development, Trade and Migration", June, mimeo.

FAO (2000),
Land Resource Potential and Constraints at Regional and Country Levels, Rome.

Farré, L. and J.L. Raymond (2002),
"Riqueza y ahorro", *Cuadernos de Información Económica*, No. 170, September-October.

Feijoó, M., J. Franco, and J. Hernández (2002),
"Global Warming and the Energy Efficiency of Spanish Industry", *Energy Economics*, 24.

Ferguson, C. (1999),
"Assessing Risks from Contaminated Sites: Policy and Practice in 16 European Countries", *Land Contamination and Reclamation*, 7(2).

Fina, L., F. González de Lena and J.I. Pérez Infante (2001),
"Negociación colectiva y salarios en España", *Colección Estudios*, No. 110, Economic and Social Council.

Garrido, A. (2001),
"Transition to Full-Cost Pricing of Irrigation Water for Agriculture in OECD Countries", OECD, Paris.

Gonzalo, M. T. (2002),
"A New Look at the UI Effect on Transitions from Unemployment into Wage Employment in Spain: the Limited Duration of the UI Benefits Entitlement", *Applied Economics*, No. 34.

Holdsworth, C. and M. Irazoqui Solda (2002),
"First Housing Moves in Spain: An Analysis of Leaving Home and First Housing Acquisition", *European Journal of Population*, 18.

ICES (2002),
Report of the ICES Advisory Committee on Fisheries Management, Copenhagen.

IEA (2001),
Energy Policies of IEA Countries: Spain 2001 Review, Paris.

INE (2001),
"Water Accounts in Spain" Joint ECE/Eurostat Work Session on Methodological Isues of Environment Statistics, Ottawa, October 1-4.

Jimeno, J.F. (2002a),
"Incentivos y desigualdad en el sistema español de pensiones contributivas de jubilación", *Working Papers*, 2002-13, FEDEA, July.

Jimeno, J.F. (2002b),
"Demografía, empleo, salarios y pensiones", *Working Papers*, 2002-04, FEDEA, January.

Kalter, F. and I. Kogan (2002),
"Ethnic Inequalities at Labour Market Entry in Belgium and Spain", *Working Papers*, No. 49, Mannheimer Zentrum Für Europäische Sozialforschung (MZES).

Laborda, Á. (2002),
"Al final de un ciclo", *Cuadernos de Información Económica*, No. 169, July-August.

Lorca Corrons, A. (2000),
"L'impact de la libéralisation commerciale euro-méditerranéenne dans les échanges agricoles", FEMISE Research Programme, *www.femise.org/PDF/A_Corrons_09_00.pdf*

© OECD 2003

Martínez, A. (2000),
"El incremento de la financiación de los servicios públicos locales mediante tasas y precios", *Análisis Local*, Número Extraordinario 1/2000, May-June.

Martínez Veiga, U. (1999),
"Immigrants in the Spanish Labour Market", in *Immigrants and the Informal Economy in Southern Europe*, edited by M. Baldwin-Edwards and J. Arango, Frank Cass, London.

Mendoza, C. (1997),
"African Employment in Iberian Agriculture and Construction: a Cross-Border Comparative Approach", *Occasional Paper*, King's College, London.

Ministry of Agriculture, Fishery and Food (2002),
The Spanish Agrofood Sector and Rural Environment, Madrid.

Ministry of Economy (2001),
"Stability Programme Update Kingdom of Spain 2001-2005".

Ministry of Economy (2002),
"Stability Programme Update Kingdom of Spain 2002-2006".

Ministry of Environment (1998),
Libro blanco del agua en España: Documento de síntesis, Madrid.

Ministry of Environment (2002a),
Tercera comunicación nacional de España: Convención marco de las Naciones Unidas sobre cambio climático, Madrid.

Ministry of Environment (2002b),
Strategic Environmental Assessment of the National Hydrological Plan: Summary Document, Madrid.

Ministry of Labour and Social Affairs (2002),
"Report on the Spanish National Strategy for the Future of the Pension System", 12 September, Madrid.

Monge Lozano, P. (2002),
"La gestión en las empresas sanitarias españolas", *Boletín Económico de* ICE, No. 2732, June.

Mora, J.G. and A. Garcia (1999),
"Private Costs of Higher Education in Spain", *European Journal of Education*, Vol. 34, No. 1.

Mora, J.G., J. García-Montalvo and A. García-Aracil (2000),
"Higher Education and Graduate Employment in Spain", *European Journal of Education*, Vol. 35, No. 2.

Moreno Fuentes, F. J. (2000),
"Immigration Policies in Spain: Between External Constraints and Domestic Demand for Unskilled Labour", presented at the ECPR Joint Sessions of Workshop, 14-19 April.

Muñoz, M. (2002a),
"Deslocalización sectorial de la inversión directa extranjera en España", *Boletín Económico de* ICE, No. 2744, October.

Muñoz, M. (2002b),
"Tasa de actividad femenina y fecundidad – Ser madre o ser activa?", *Boletín Económico de* ICE, No. 2773, March.

Namkee, A. (2001),
"Age at First-Time HomeOwnership in Spain", *Working Paper* 2001-23, FEDEA, December.

© OECD 2003

National Commission for Energy (2002),
Informe sobre las compras de energía al regimen especial: Periodo año 2001.

OECD (1997a),
OECD *Employment Outlook*, Paris.

OECD (1997b),
Environmental Performance Reviews, Spain, Paris.

OECD (1998),
OECD *Employment Outlook*, Paris.

OECD (1999),
Education Policy Analysis, Centre for Educational Research and Innovation, Paris.

OECD (2000),
OECD *Economic Surveys: Spain*, Paris.

OECD (2001a),
OECD *Economic Surveys: Spain*, Paris.

OECD (2001b),
"Tax and the Economy: A Comparative Assesment of OECD Countries", OECD *Tax Policy Studies*, No. 6.

OECD (2001c),
OECD *Science, Technology and Industry Scoreboard – Towards a Knowledge-Based Economy*, Paris.

OECD (2001d),
Education at a Glance – OECD *Indicators*, Paris.

OECD (2001e),
Environmental Indicators for Agriculture: Methods and Results, Vol. 3, Paris.

OECD (2001f),
OECD *Employment Outlook*, Paris.

OECD (2002a),
OECD *Economic Surveys: Switzerland*, Paris.

OECD (2002b),
The New Economy: Beyond the Hype – The OECD *Growth Project*, Paris.

OECD (2002c),
Education at a Glance – OECD *Indicators*, Paris.

OECD (2002d),
African Economic Outlook, Paris.

Pareja, M. and I. San Martín (2002),
"The Tenure Imbalance in Spain: The Need for Social Housing Policy", *Urban Studies*, Vol. 39, No. 2.

Poveda, F. and A. Sánchez (2002),
"La financiación impositiva municipal. Propuestos para su reforma", *Papeles de Economía Española*, 92/2002, Fundación de las Cajas de Ahorros Confederadas para la Investigación Económica y Social.

Revenga, C., J. Brunner, N. Henninger, K. Kassem and R. Payne (2000),
Pilot Analysis of Global Ecosystems: Freshwater Systems, World Resources Institute, Washington, D.C.

© OECD 2003

Rogers, J. (2001),
"Price Level Convergence, Relative Prices and Inflation in Europe", *International Finance Discussion Papers*, No. 699, March.

Sáez, F. *et al.* (2001),
"Evaluación de la estrategia europea de empleo: España", Report for the European Commission, mimeo.

Samuelson, P. (1958),
"An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money", *The Journal of Political Economy*, Vol. 66, No. 6, The University of Chicago Press.

San Martín, I. (2000),
"Rent or Buy?", *Real Estate Situation*, BBVA Research Service, October.

Spiess, C.K. and U. Schneider (2002),
"Midlife Caregiving and Employment – An Analysis of Adjustments in Work Hours and Informal Care for Female Employees in Europe", ENEPRI *Working Paper*, No. 9.

Trilla, C. (2001),
"La política de vivienda en una perspectiva europea comparada", *Estudios Sociales*, La Caixa, No. 9, *www.estudis.lacaixa.comunicacions.com/webes/estudis.nsf/wurl/pfes009cos_esp*

Trilla, C. and A. Carreras (2001),
Promoció Ciutat Vella, S.A.

Uche, J., L. Serra and A. Valero (2001),
"Hybrid desalting systems for avoiding water shortage in Spain", paper presented at the European Conference on Desalination and the Environment: Water Shortage, Lemesos, Cyprus, 28-31 May.

UNDP (2002),
Arab Human Development Report.

© OECD 2003

Table of contents

Assessment and recommendations 9

I. Economic developments, the fiscal stance and prospects 21

Overview 21
Recent trends 23
Fiscal policy in the short run 40
Prospects 47

II. Medium and long-term fiscal policy challenges 51

Fiscal policy: being prudent, while ensuring flexibility 51
Increasing public sector efficiency has to remain a priority 55
The consequences of ageing: pension reform is more urgent than generally perceived 63

III. Structural reforms to sustain a strong performance 67

Labour markets 70
Education and R&D 80
Housing market 92
Competition policy 99
Financial markets 105
The benefits from deepening structural reforms 107
Sustainable development 108

IV. The economic impact of migration 127

Introduction 127
Migration stocks and flows 127
Migration policy: still in the making 134
Economic aspects of immigration 142
Integrating immigrants 154
Conclusions and recommendations 157

Notes 160

Glossary of acronyms 175

Bibliography 177

© OECD 2003

Annexes

I. Supporting material 184
II. The decentralisation and financing reform of autonomous communities and local authorities 188
III. Main measures of the personal income tax reform 192
IV. Rental supply and demand incentives 194
V. The effect of employment shifts on labour productivity growth and the contribution of immigration of non-EU foreigners 197
VI. Calendar of main economic events 200

Boxes

1. Risks to the outlook 49
2. Private rates of return from non-compulsory education 88
3. Analysis of rental supply and demand incentives 97
4. The integration of environmental concerns into government policy 110
5. EU-wide immigration policies 135
6. The new quota system for work permits 140
7. Projections of public pension expenditure 152
8. EU agricultural market access for South Mediterranean countries 154

Tables

1. Demand and output 23
2. Financial position of the economic sectors 24
3. Financial performance of non-financial firms 29
4. Productivity and real wage growth by sector 34
5. Inflation differential between Spain and the euro area 41
6. The fiscal consolidation process 44
7. General government accounts 45
8. Short-term prospects 48
9. Stability Programme 2002-06 52
10. Expenditure by level of government 53
11. Local government revenue in OECD countries with federal structure 57
12. Tax revenues in OECD countries 58
13. Evolution of health expenditure 61
14. Recommendations for further structural reforms 71
15. International comparison of unemployment benefits 75
16. Public expenditure on labour market policies 78
17. Educational attainment by age 81
18. Participation in education at typical ages 82
19. Student performance at age 15 83
20. Private rates of return on education 89
21. Household assets 94
22. Tenure and availability of housing 95
23. Main indicators: climate change 112
24. Performance indicators: waste 116
25. Treatment systems for waste in Spain 117

© OECD 2003

26. Fees for extended producer responsibility schemes in Europe 118
27. Recovery and recycling rates and targets 119
28. Costs of composting in selected European countries 120
29. Main indicators for water withdrawal and land degradation 121
30. Immigration statistics in Spain 129
31. Regularisation processes 136
32. Annual quota for work permits in the 1990s 136
33. Work permits 138
34. Education level and type of employment: foreigners *versus* natives 143
35. Workers affiliated with the social security system 145
36. Unemployment rates of foreigners and natives 146
37. Fiscal impact of non-EU immigrants 150

Annexes

A1. Balance of payments 185
A2. Inflation decomposition: comparison between Spain and the euro area 186
A3. Greenhouse gas emissions and sectoral indicators 187
A4. Local governments' expenditure by function 190
A5. The effect of employment shifts on labour productivity growth and the contribution of immigration 199

Figures

1. Key indicators in international perspective 22
2. Output gap and economic activity indicators 25
3. Credit to households and asset prices 27
4. Household indebtedness 28
5. Competitiveness indicators and export performance 30
6. Contributions to GDP growth 31
7. Employment and unemployment: key features 33
8. Inflation decomposition for Spain and the euro area 37
9. Profit margins by sector 39
10. Consumer prices 40
11. The macroeconomic policy stance 41
12. Budget balances 43
13. Risks of a weaker European recovery 50
14. Decomposition of the business sector potential growth 68
15. Real GDP growth by sector 69
16. Public expenditure on active labour market policies and unemployment rates 79
17. Annual educational expenditure per student, 1999 84
18. Business R&D expenditure 90
19. Internet infrastructure 91
20. Housing market trends 93
21. Wealth developments linked to housing purchase/rental 98
22. Telecommunications prices 101
23. Medium-term effects of structural reforms 109
24. Greenhouse gas emissions 111
25. Application of efficient irrigation methods 124
26. Foreign population in selected OECD countries 128
27. Foreign population by nationality for the top 15 source countries 130
28. Length of stay of foreigners 131
29. Income differentials 132

© OECD 2003

30. Population projections for Spain and selected source countries 133
31. Population of selected source countries/regions, aged 15-44 133
32. Workers' remittances 153
33. Disadvantage in reading of 15 year-old children 157

Annexes

A1. Investment cycles 184
A2. Wealth developments linked to housing purchase/rental 195

© OECD 2003

BASIC STATISTICS OF SPAIN (2002)

THE LAND

Area (1 000 km²):		Major cities (thousand inhabitants):	
Total	506.0	Madrid	3 017
Cultivated (1998)	185.1	Barcelona	1 527
		Valencia	762
		Seville	704

THE PEOPLE

In thousands:		Employment (thousands)	16 258
Population	41 838	Employment by sector (% of total):	
Net natural increase (2001)	45	Agriculture	5.9
Net migration (2001)	247	Industry	19.4
Number of inhabitants per km²	82.7	Construction	11.8
		Services	62.9

PRODUCTION

Gross domestic product (GDP):		Gross fixed capital investment:	
Billion EUR	694	% of GDP	25.4
Per head (US$)	15 631	Per head (US$)	3 973

THE GOVERNMENT

% of GDP:		Composition of Parliament	
Consumption	17.6	(No. of seats, March 2000):	350
Revenue	38.5	Popular Party (PP)	182
Deficit	–0.1	Spanish Labour Socialist Party (PSOE)	125
Fixed investment (% of gross fixed capital formation)	13.1	Convergence and Union (CIU)	15
		Izquierda Unida (IU)	8
		Basque Nationalist Party (PNV)	7
		Other	13
		Next general elections: March 2004	

FOREIGN TRADE

Exports of goods and services (% of GDP)	28.5	Imports of goods and services (% of GDP)	30.0
Exports as a % of total goods exports:		Imports as a % of total goods imports:	
Foodstuffs	12.5	Foodstuffs	6.6
Other consumer goods	28.8	Other consumer goods	20.9
Energy	2.0	Energy	10.7
Other intermediate goods	44.6	Other intermediate goods	46.0
Capital goods	12.2	Capital goods	15.8

THE CURRENCY

Monetary unit: Euro		Currency units per US$, average of daily figures:	
		Year 2002	1.0611
		February 2003	0.9276

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is published on the responsibility of the Economic and Development Review Committee *of the* OECD, *which is charged with the examination of the economic situation of member countries.*

•

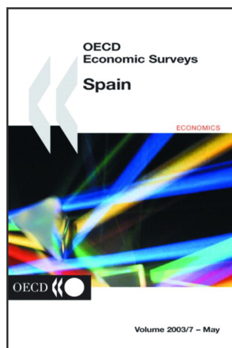
The economic situation and policies of Spain *were reviewed by the* Committee *on* 24 February 2003. *The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole* Committee *on* 27 March 2003.

•

The Secretariat's draft report was prepared for the Committee *by* Claude Giorno, Miguel Jimenez, Douglas Sutherland *and* Ann Vourc'h *under the supervision of* Peter Hoeller.

•

The previous Survey of Spain *was issued in* June 2001.



From:
OECD Economic Surveys: Spain 2003

Access the complete publication at:
https://doi.org/10.1787/eco_surveys-esp-2003-en

Please cite this chapter as:

OECD (2003), "Annexes", in *OECD Economic Surveys: Spain 2003*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eco_surveys-esp-2003-7-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

OECD