

International Economic Overview

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In 2011, President José Luis Rodríguez Zapatero proposed sweeping amendments to article 135 of the Spanish Constitution.

The Controversial Reform of Article 135 of the Spanish Constitution

The continued growth in Spanish public debt and the country's rising interest payments raise serious doubts about the wisdom of the former government's reform of article 135 of the Spanish Constitution. Despite the initial overwhelming support of the main political parties, some MPs are beginning to backtrack. But how realistic are the policy alternatives?

On August 23, 2011, when the Spanish 10-year bond was paying out interest of 5 percent, the risk premium was at 287 basis points and the Spanish economy was on the verge of requesting a bailout, the President of Spain, José Luis Rodríguez Zapatero, proposed sweeping amendments to article 135 of the Spanish constitution. The measure enjoyed the full support of the Spanish Socialist Party (PSOE), the People's Party (PP) and the Navarrese People's Union (UPN).

As the PSOE and PP accounted for more than 90 percent of Spain's MPs and senators and the reform was a simple matter of customary procedure, there was no need to call a referendum to pass it. And since neither of the two chambers was able to muster a 10 percent bloc of representatives demanding a public referendum within the stated time frame, the constitutional reform was ultimately approved and signed into law on September 27, 2011. It went into force exactly one month and four days after the amendment was initially proposed.

The original text of Article 135 read as follows:

1. *The Government must be authorized by law to issue Public Debt bonds or to contract loans.*

2. *Loans to meet payment on the interest and capital of the State's Public Debt must always be included in budget expenditure and may not be subject to amendment or modification as long as they conform to the terms of issue.*

The modified Article 135 stated that:

1. *All public administrations will conform to the principle of budgetary stability.*

2. *The State and the autonomous communities may not incur a structural deficit that exceeds the limits established by the European Union for their member states. An Organic Law shall determine the maximum structural deficit the state and the autonomous communities may have, in relation to its gross domestic product. Local authorities must submit a balanced budget.*

3. *The State and the regions must be authorized by law to issue Public Debt bonds or to contract loans. Loans to meet payment on*

The new version of Article 135 obliges Spain's public administrations to comply with the budgetary stability principle.

Although a new organic law is needed to make the exact details operational, the constitutional reform guarantees that the sequence of public deficits registered between 2008 and 2013 will never be repeated.

If the central and regional governments opt to raise taxes, it will be the rich that will have to pay a little more, at least, in theory. But if they opt instead to starve public services of funds, it will be the poorest that will end up funding the vast bulk of accumulated deficits.

the interest and capital of the State's Public Debt must always be included in budget expenditure and their payment shall have absolute priority. These appropriations may not be subject to amendment or modification as long as they conform to the terms of issue. The volume of public debt of all the public administrations in relation to the State's gross domestic product may not exceed the benchmark established by the Treaty on the Functioning of the European Union.

4. *The limits of the structural deficit and public debt volume may be exceeded only in case of natural disasters, economic recession or extraordinary emergency situations that are either beyond the control of the State or significantly impair the financial situation or the economic or social sustainability of the State, as approved by an absolute majority of the members of the Congress of Deputies.*

5. *An Organic Law shall develop the principles referred to in this article, as well as participation in the respective procedures of the organs of institutional coordination between government fiscal policy and financial support.*

In any case, the Organic Law will address:

a) *The distribution of the limits of deficit and debt among the different public administrations, the exceptional circumstances to overcome them and the manner and time in which to correct the deviations on each other; b) The methodology and procedure for calculating the structural deficit; c) The responsibility of each public administration in case of breach of budgetary stability objectives.*

6. *The autonomous communities, in accordance with their respective laws and within the limits referred to in this article, shall take the appropriate procedures for effective implementation of the principle of stability in their rules and budgetary decisions.*

Additional amendments established that the structural deficit limits contained in Article 135.2 would come into force in the year 2020. The new version of Article 135 obliges Spain's public administrations to comply with the *budgetary stability principle*. This must be interpreted as an explicit limitation on the structural deficits of the central and regional governments as well as an obligation on the local corporations to maintain a balanced budget.

The structural deficit refers to the amount that remains after subtracting from the public sector balance the fluctuations in revenues and public spending attributable to economic cycles. Public revenues are generally procyclical – they increase during growth periods and decrease during recessions – although some components, such as unemployment benefits, are countercyclical. As such, one can assume that the budgetary balance is on the whole procyclical and that any principle that limits the structural deficit actually encourages deficits. However, it does obligate governments to ensure that the surpluses obtained during expansionary phases are used to compensate for the deficits produced during recession.

Spain's constitutional reform does not set an explicit numerical limit for the structural deficit. However, the political agreement that accompanied it imposed a limit of 0.4 percent of GDP – 0.26 percent for the central state and the remaining 0.14 percent for the regional authorities. In Germany, the respective limits, which were included in its own constitutional reform, are 0.35 percent for the Federal Administration and 0 percent for the federal states.

Although in Spain a new organic law is needed to make the exact details operational, it is clear that the constitutional reform guarantees that the sequence of public deficits registered between 2008 and 2013 – 4.1 percent of GDP in 2008; 11.2 percent in 2009; 9.7 percent, in 2010; 9.6 percent, in 2011; 10.7 percent, in 2012; and 7.1%, in 2013 – will never be repeated.

Such bloated deficits increased the Spanish public debt from 364 billion euros in January 2008 to 966 billion in December 2013; or otherwise put, from 34.9 percent of GDP, in 2008, to 94.6 percent, in 2013 – in other words from 7,780 euros per capita, in 2008, to 20,640 euros, in 2013. As such, by the end of 2013 a family of four members owed 82,560 euros, a bill that will have to be paid through deferred tax payments or deteriorating public services. If the central and regional governments opt to raise taxes, it will be the rich that will have to pay a little more, at least, in theory. But if they opt instead to starve public services of funds, it will be the poorest that will end up funding the vast bulk of these accumulated deficits.

As if that were not enough, the running costs of maintaining this mountain of debt are



already being felt. The Spanish people are paying a hefty price in the form of the compound interest that the various levels of government are obligated to pay out on their debt each year. In 2007, the accumulated interest payments on the Spanish public debt reached 18.5 billion euros, a little less than half of the total education budget (37.3 billion euros). By 2013 the interest payments had shot up to 39.13 billion euros, surpassing total spending on public education (37.18 billion) by almost two billion euros. In percentage terms, in 2007 the interest payments represented 4.4 percent of total public spending; by 2013 they had reached a staggering 9.3 percent. What's more, the amended version of Article 135.3 gives "absolute priority" to the payment of interest above all other areas of public spending.

In the face of this bleak situation, Pedro Sánchez, the new general secretary of PSOE, has publicly announced that he now regrets voting for the constitutional amendment.

What he has not done, however, is explain how he would like to see it changed. As for Pablo Iglesias, the general secretary and presidential candidate of Podemos (which translates as "We Can"), he has said that a government under his control would simultaneously (a) cease paying part of the debt and (b) allow the public administration to keep expanding its debt load. It's worth bearing in mind that in 2014 alone Spain's public administration has had to borrow close to 250 billion euros from the markets in the form of new and refinanced debt. Each percentage-point rise in the interest rate would translate into 10 billion euros of additional financing costs.

I strongly doubt that Pedro or Pablo's ideas are well grounded in today's reality. Quite frankly, I don't think "we can."

Javier Díaz-Giménez. Professor of Economics,
IESE Business School

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Some Basic Economics for the Crisis

At the end of seven lean years, four words appear in every debate about the crisis: austerity, growth, stimulus and reforms.

Moreover, they are often paired off as opposites, each pair as a dilemma: austerity vs. growth, stimulus as opposed to reform, thus muddling the discussion and contributing to the paralysis that is slowly engulfing the eurozone. A return to what one learns in the very first lesson of an economics course may dispel some of the confusion.

A Simple Economy

Figure 1 presents the simplest representation of a market economy, the Circular Flow; complications will appear as needed. The figure shows that *aggregate demand* (also called *expenditure*) corresponds to the line connecting households and the market for goods; similarly, *supply* (also called *GDP*) is the line connecting firms and the market for goods. On the lower side, *production costs* connect firms and the market for services, *income* connects the services market with households.

Figure 1 is a good first approximation to real-world market economies: output (GDP) is produced by firms with the help of services

purchased from households, and bought by households with the income earned by selling their services to firms. The reader can supplement the figure by drawing lines, on the left side, representing investment or government spending as supplementing the demand from households; even exports and imports may be brought in at little extra cost. It can be seen from the figure that whatever enters the goods market as output exits as spending, or, in other words, that *supply equals demand*. Clearly, monetary and fiscal policies, which aim at influencing investment or government spending, are demand policies; measures which aim at influencing the conditions under which output is produced – labour market legislation, liberalising measures – are *supply-side* policies, often called structural measures.

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Supply and Demand

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That was easy. But why did we say “most of the time?” Because a demand policy, such as curbing public spending, may affect the supply side. It may happen that when the public sector cuts back, workers accept lower wages, or firms accept lower profits as the price for staying in a shrinking market. Lower prices will be the result, the conditions under which output is produced will have changed: newspapers will say that the economy has become more competitive. Looking back at Figure 1, we will say that the supply side has changed. Conversely, a measure aimed at the supply side may have effects on the demand side: a general reduction in wages will result in improved supply conditions – higher competitiveness, we say – but, looking at the lower side of our figure, it will result in a smaller flow of income to households, hence in lower spending, a demand-side effect.

Our figure reminds us of the fact that in dealing with the whole economy, demand and supply cannot be considered as independent from one another. At the most, one can estimate that a given event may affect one side much more than the other. Thus, the recent drop in oil prices is likely to have a much greater effect on supply, through lower input costs, than on demand, through higher use of cars by households. But one must be careful to look at both sides before reaching a conclusion.

Policy Alternatives

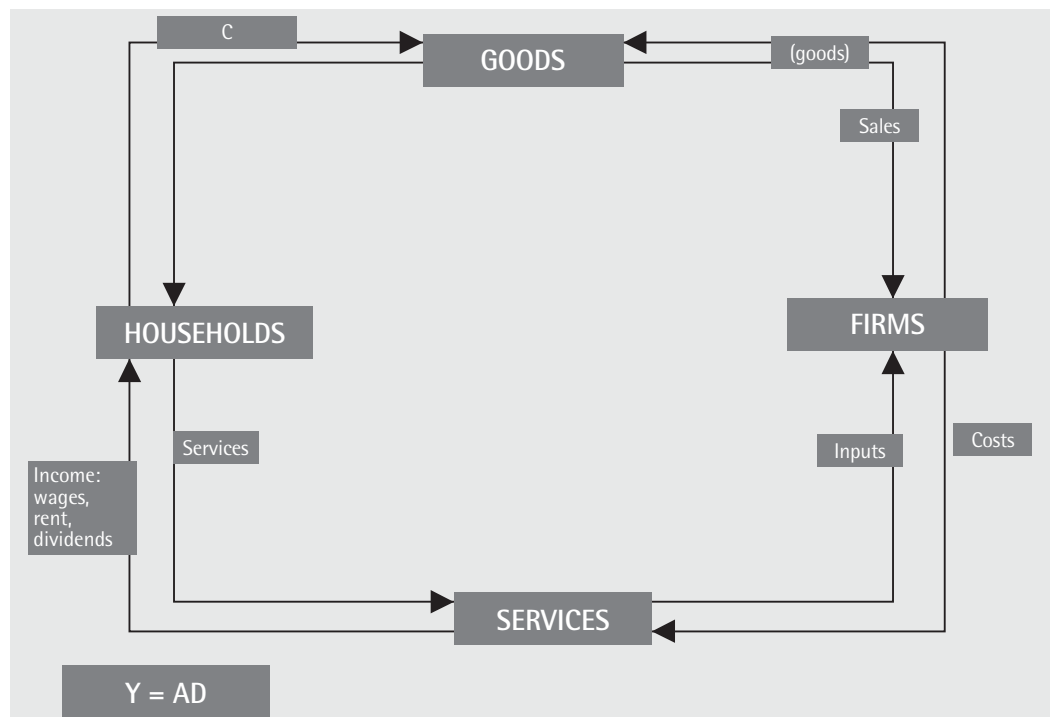
There is a second complication: a given economy may have both a demand and a supply problem. Within the eurozone, this might apply to a peripheral country such as Spain.

On one hand, extraordinarily high unemployment and idle capacity point to a deficit in demand. But on the other hand, there are signs of supply-side problems. First, the high level of unemployment cannot be blamed on a bad patch in business conditions (that is, on the cycle), when one recalls that, in the last 20 years, unemployment in Spain has been well above the eurozone average but for one year, 2007. Something is wrong with Spain’s capacity to absorb manpower. Second, the excessive weight of low-productivity sectors such as construction and tourism suggests that, in the long run, the Spanish economy may not be able to deliver the sort of public services its citizens expect.

This being the case, what is to be done? Demand stimuli are needed, if nothing else to absorb the enormous stock of unemployed workers inherited from the construction bubble. But whatever form they may take – less ambitious objectives for deficit reduction, more aggressive monetary policy from the ECB – and whatever one may think of their effectiveness, they would not be sustainable in the long run.

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Figure 1. Circular Flow of a Market Economy





The advantage gained by the painful price and wage adjustment could be thrown away. Reforms alone – more labour market flexibility, liberalisation of services – are not enough. First, they do not by themselves generate growth. Growth may come if increased competitiveness draws demand from abroad, that is, through higher exports, and that depends, of course, of the general climate within the EU. Second, they do, by themselves, result in lower domestic demand through a combination of lower wages and higher unemployment. The net effect of continued reforms on aggregate demand and employment may well be negative. The result may be to turn a recession into a depression.

In the face of so many doubts, before turning to the healing force of nature to get the country out of its predicament, it is instructive to look once more at our simple economy to notice a glaring omission: time. And with time, debt.

The economy depicted in Figure 1 shuts down every Dec. 31 to reopen Jan. 1 with a clean slate. In real life, however, debt is carried from one period to the next. If, in boom times, households spend more than their

current income, in bad times their consumption is constrained by the need to deleverage. Debt relief to households, therefore, is a good substitute for deficit spending, likely to have a higher multiplier and thus to be an efficient demand-side policy. Such a measure would raise all kinds of issues, operational as well as of those of fairness. Of course, the burden of the adjustment would have to fall on someone. This may be the reason why the issue has been studiously avoided in official discussions.

In practice, continuation of the present policies, which seem to rely on supply-side measures to solve both supply- and demand-side problems, is likely to be the outcome, at least for the time being. The reader should realize that the justification for such a one-sided approach to complex issues is not grounded in economic arguments. This lack of solid economic basis is no doubt known to policymakers. Current policies may be rooted instead in a lack of trust which, however legitimate, does not augur a very successful continuation of the European project.

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Energy and Climate Change

The three main objectives of energy policy are safety or security (a secure supply and reliability in the operation of the energy system), affordability (cheap supply) and cleanness (sustainability and control of climate change). Those objectives are not always compatible.

For example, an increasing reliance on national coal will improve security of supply but will increase emissions and may also increase costs if national coal production is more expensive than imports. Different continents have set different priorities with respect to the trade-offs in the triangle of goals. Asia (China and India, mostly) have put affordability first, and cleanness last, in order to promote growth. The USA has tended to put security first and also cleanness last. The European Union seems to be the only area where cleanness comes first.

Why do we have to worry about the emissions of greenhouse gases? The answer lies in the dangers of temperature increases over 2°C that may destabilize the climate with

very adverse consequences. How can we compute the social cost of emitting one ton of CO₂? We have to consider how long CO₂ stays in the atmosphere, how much damage a given concentration of CO₂ causes, and the discount factor applied to future generations.

The basic objective of climate change policy is to cut the emissions of greenhouse gases. From economic principles the best way to accomplish the goal is to set a price for carbon, that is a carbon tax. This would send the right price signal to correct the external effects caused by pollution. Indeed, emitters do not take into account the damage they do to the environment when they produce. A carbon tax would encourage cleaner technologies and energy efficiency. But what is the right tax?

Different continents have set different priorities with respect to the trade-offs in the triangle of energy policy goals.

It would be safer to establish a quota to cap the emissions to make sure that we do not surpass the desired upper boundary of concentration of CO₂. But this will require a huge effort since emissions are projected to keep growing.

This will depend very much on what weight we pass on to future generations. The right tax is very sensitive to the discount rate; the lower the latter is (i.e., the more weight we pass on to future generations), the higher the tax.

There is intense debate about the appropriate discount rate since this is an issue about intergenerational fairness on which there is no consensus. Furthermore, there is a risk of passing the tipping point towards disaster if we exceed 445 parts per million of concentration of greenhouse gases (CO₂ equivalent), which is the limit for avoiding dangerous temperature increases beyond 2°C.

This indicates that it would be safer to establish a quota to cap the emissions to make sure that we do not surpass the desired upper boundary of concentration of CO₂. But this will require a huge effort since emissions are projected to keep growing instead of shrinking in the medium term (say up to 2035), implying temperature increases that may go well beyond the 2°C target increase.

For example, Figure 1 displays the necessary intervention in the EU power sector to meet the targets (after the post-Fukushima dismissal of nuclear energy by Germany). We see how the current mix should be adjusted towards a much larger use of renewables and a much smaller share of coal by 2035 in order for CO₂ intensity in power generation to decrease dramatically.

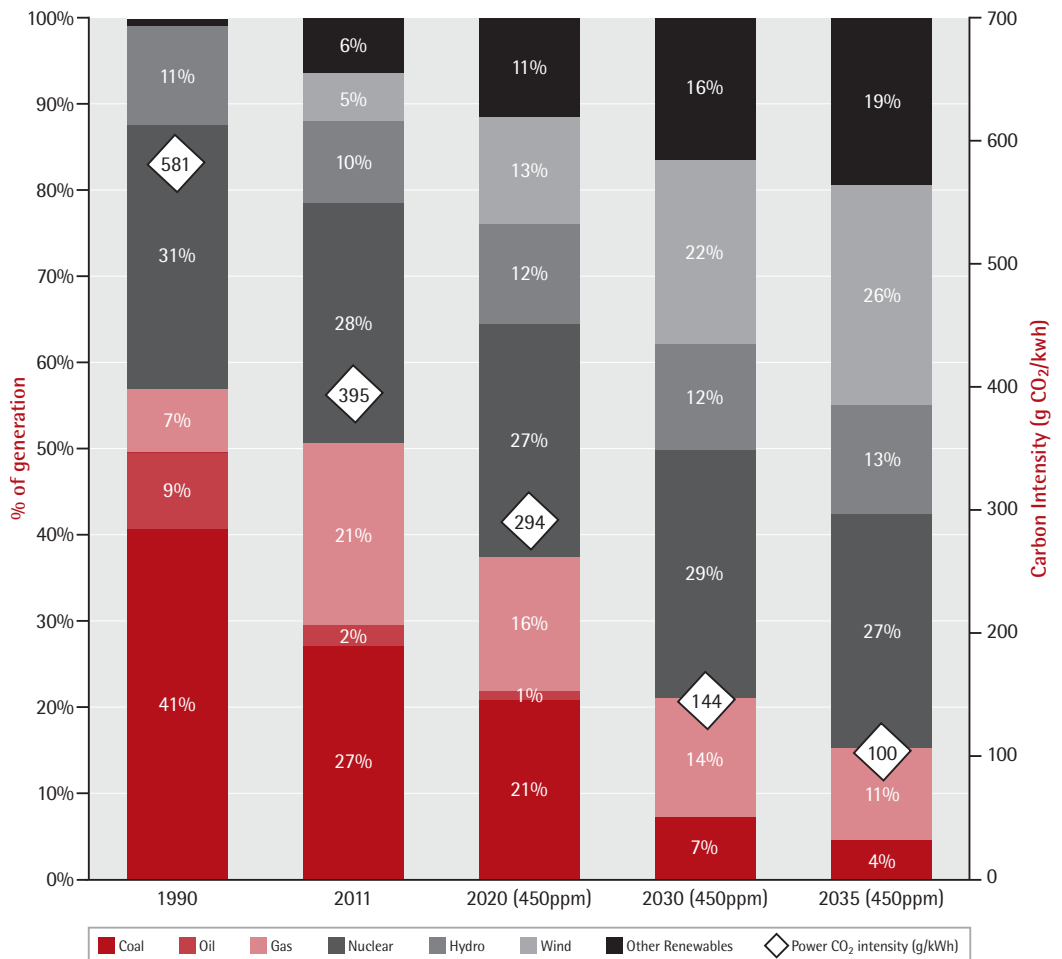
The EU has the ambitious objective of transforming the energy power sector into a low or zero carbon model by 2050. In its 2007 package, it set the “three 20s” objective for 2020 : 1) at least a 20% reduction in greenhouse gas emissions by 2020 over 1990 (and up to a 30% reduction if there is a global agreement); 2) 20% savings of the EU’s energy consumption over projections for 2020; and 3) 20% share of renewable energies in overall EU energy consumption by 2020.

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The EU has the ambitious objective of transforming the energy power sector into a low or zero carbon model for 2050.

The EU is offering to increase its emissions reduction to 40% by 2030 together with at least a target of 27% use of renewable energy and energy efficiency increase in the horizon of 2030.

Figure 1. Energy Targets



Source: IEA (WEO 2013¹)

¹ IEA (2013), *World Energy Outlook 2013*, International Energy Agency report. <http://www.worldenergyoutlook.org/publications/weo-2013/>



and energy efficiency increase in the horizon of 2030. The question is whether other major economies in the developed and developing world will commit to undertaking their fair share of a global emissions reduction effort. This is complicated by the well-known “carbon leakage” problem: when reductions in one area lead to expanded production and emissions in another country. A major potential advance in this respect has been the recent agreement between China and the US to negotiate in order to lower their emissions.

The EU proposes three directives to control climate change: 1) Cleaning with a mandatory quota system of CO₂ emission certificates (the Emissions Trading System ETS); 2) greening with support for renewable technologies; and 3) saving to improve energy efficiency. The question is whether it makes sense to use three tools to accomplish one basic objective (cut greenhouse gases).

In particular, do we need quantitative targets for energy saving and renewables? The problem is that subsidizing green power requires setting policy instruments with very imperfect knowledge of the relationship between the policy instrument and the outcomes. This means that a small mistake in setting the subsidy rate may lead to a large misallocation of resources, as the subsidies to renewables in Spain have shown when targets that had to be reached in years were reached in months due to poor design. The result has been, for example, a boom and bust in capacity investment in solar technology in Spain and Germany. Indeed, in 2008, Spain was the largest market for new solar generation in the world, but both its manufacturing and new capacity installation collapsed in 2009 when the country cut back subsidies. Germany continued to grow installations of solar photovoltaic technology, more than quadrupling new capacity from 2008 to 2010, but panel manufacturing in Germany declined from 77 percent of new installed capacity in 2008 to 27 percent in 2010.

Subsidies to renewables have been justified by the learning curve argument. According to this theory, low carbon technologies need protection to develop because of the positive external effects they generate and the steep learning curve in which they operate. The latter means that production costs fall sharply as production accumulates. However, it is difficult to fine-tune subsidies because it is not easy to separate learning-by-doing from other changes and from economies of scale in production. Furthermore, learning externalities differ among technologies, but are not large enough to motivate substantially different treatment. It is worth noting that reducing a unit of emissions has the same value independent of how it is achieved. Despite this, there is a large variation in the level of subsidies to different green technologies across the EU.

Subsidies to renewables have been a main, and sometimes perhaps the only, industrial policy in Spain, Germany and other countries. This has been based on the so-called infant industry argument, which is well-summarized by Moretti: “Up-front investment will create network externalities and learning that spill over much more strongly intra-nationally than internationally, creating a sustainable economic advantage for the country that makes the investment”.² In short, subsidizing a local industry which is subject to the learning curve will make it competitive internationally and the investing country will come out ahead in the international competition. This is the theory. In solar panel manufacturing, this has provided excellent results for China and Taiwan. Indeed, as we have seen, Spain went from the largest market for solar generation in 2008 to collapse when subsidies reverted; and in Germany, solar panel manufacturing also collapsed.

Xavier Vives. Professor of Economics,
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² Moretti, E. (2012), *The New Geography of Jobs*. New York: Houghton Miffl.

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