The decline of labor income is another challenge for public pensions

Aging populations get the headlines, but the shrinking share of labor income in GDP is a major factor of pension sustainability.



May 14, 2025

By Julian Diaz Saavedra and Javier Diaz-Gimenez

Much of the debate about how Western economies can continue to pay state pensions has

©IESE Business School

focused on demographic trends — specifically, the aging populations of much of the developed world. But there is a less visible but equally concerning factor that threatens to undermine pension sustainability: the falling share of labor income in GDP.

In "Factor income shares and pension sustainability: a primer," we explore the results of a study based on an overlapping generations model that simulates the functioning of the Spanish economy. The findings are troubling: If labor income (comprising wages and salaries and supplementary labor income) continues to fall, the public pension system deficit will grow significantly in the coming decades.

Mismatch between revenue and spending

Imagine GDP as a pie divided between workers and capital owners, with workers getting a smaller slice over time. In the 1990s, wages represented 55% of everything the economy produced; today that figure is around 50%. This means that, even if the pie grows, the portion going to wages will shrink.

Since public pay-as-you-go pension systems like Spain's are primarily funded by payroll taxes, a decline in the wage share also reduces the amount collected through these contributions. Therefore, a drop in labor income as a percentage of GDP automatically reduces system revenue.

Meanwhile, pension spending doesn't adjust as quickly. Pensions are calculated based on past wages, so the effect of lower labor income takes time to impact spending.

Let's imagine a 45-year-old Spaniard who goes from earning €40,000 a year to €35,000. The contributions that this worker and the employer pay into the system will also drop, directly affecting pension revenues overall. However, this person's future pension will still be calculated based on the last 25 years of earnings. So, the effects of lower wages won't show up in spending for decades.

Thus, the financial gap is created today but the spending adjustment only happens when the worker retires — about 22 years later in this case. This creates a mismatch between revenue and spending, which in the short- and medium-term results in a higher system deficit.

©IESE Business School

Why the labor share of GDP matters

To quantify these effects, the authors simulate two scenarios for the Spanish economy over the coming decades:

1. In the first, labor income remains constant as a percentage of GDP.
2. In the second, the labor share falls from 52% in 2018 to 40% in 2060.

The results are clear: Payroll tax revenues drop immediately, while the adjustment in pension spending takes much longer. Moreover, if pensions are calculated using long work histories, as is the case in many European countries, the lag is even greater, and the system's financial imbalance worsens.

What if capital income also falls?

In an even more worrying scenario, the authors explore what would happen if capital income declined along with labor income. This double drop would cause an even sharper fall in average wages because when capital contributes less to income, the GDP pie shrinks and the workers' share also decreases in absolute terms. As a result, the system's sustainability deteriorates further.

International implications

Although the analysis focuses on Spain, any country with a public pay-as-you-go pension system is open to the same risks.

There is an urgent need to radically reform such systems. The authors, with over two decades of research on this issue, advocate for a new mixed system inspired by the Swedish model, which combines:

- A contributory pay-as-you-go component in which current workers fund current pensions, but where pension rights strictly depend on the total amount each person has contributed throughout their working life, properly adjusted.
- A fully funded component through mandatory personal plans. Part of each worker's contribution is invested in a diversified, profitable portfolio, and when workers retire, this capital plus its returns become part of their retirement income.

©IESE Business School

For executives, start planning today

For business leaders, these conclusions translate into specific recommendations:

- **Raise awareness and educate employees.** The sustainability of public pensions is in question. Companies can play a key role by promoting private savings, offering complementary pension plans and providing financial education.
- **Review compensation and long-term savings policies.** In a changing labor market with falling labor income, it is essential to design compensation strategies that encourage long-term savings.



Javier Diaz-Gimenez

Professor in the Economics Department at IESE and holder of the Cobas A.M. Chair for Savings and Pensions.

www.iese.edu/insight

©IESE Business School