

## Box D: Public-sector wages: A view from economic theory

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### Public-sector wages: a price or a policy?

In a well-functioning private-sector labour market, the wage is an allocative mechanism that responds to market forces of supply and demand. In the public sector, wages are an allocative mechanism, but also a policy instrument. The government has the power to unilaterally change the conditions of many of its labour contracts. Plus, wage growth is one of the key political decisions when preparing the yearly budget.

Ideally, policymakers should set employment at a level high enough to produce the public goods that the citizens wish for and pay a wage that clears the market. In general, that is the wage paid by the private sector, except when the public sector offers additional compensating benefits, like job-security, better pensions, or better work-life balance. In those cases, the public(-sector) wage should reflect those differences and be lower than that of the private sector. Out of a perfect world, wage determination is much more complex, because public wages are used as an instrument to achieve many, sometimes conflicting, objectives, creating differentials with the private sector and imbalances in the labour market.

### One instrument, various objectives

Buchanan and Tullock (1977) made the first reference to political economy aspects of wage determination. They describe how the wages of civil servants rose more rapidly than those of private-sector workers between 1954 and 1974, attributing it to the political power of civil servants that was directed towards raising their own salaries. They called it the Wagner Squared hypothesis, saying that government spending would increase rampantly as a result of the double tendency of hiring more workers and paying them more. Borjas (1980) found that employees in federal agencies with small and well-organized constituencies generally receive higher wage rates. The role of unions as a leading explanation for public-private wage differentials, was predominant in the literature in the 1970s and 1980s (Reder, 1975).

Political considerations can be even more notorious. Public wages are vulnerable to manipulation for electoral reasons. Borjas (1984) found that, in the United States, wage growth in federal agencies was two to three per cent higher in election years. Matschke (2003) found systematic public wage increases of two to three per cent prior to federal elections in Germany.

Public wages respond to the tightness of the budget. Gyourko and Tracy (1991) found that US cities with access to sales taxes and without limits to property-tax, had significantly higher public wages. In their study of the impacts of property-tax limits on local government employment and wage policies, Poterba and Rueben (1995) also found that such limits slowed the growth rate of government wages. The austerity during the Euro Area crisis paved the way to substantial changes in public-sector pay. The restraining effect of budgetary conditions on public wage growth, was also found, using aggregate data for a panel of OECD countries by Afonso and Gomes (2014).

Many economists in policy circles share a Keynesian view that procyclical spending amplifies the fluctuations of aggregate demand, leading to inflation spirals and higher volatility. They see public wages as any other type of spending, that should be counter-cyclical to smooth aggregate demand fluctuations. (Holm-Hadulla et al. 2010 and Lamo et al. 2013). Other economists think public wages should be used to correct for undesirable outcomes in private(-sector) wages. For instance, if inequality is high, public wages can be raised to foster private wage growth. A variation of this argument has resurfaced recently, calling for wage moderation in the public sector, to help containing rising inflation.

Another important aspect is that wage differentials depend, to a large extent, on past decisions. Public wages are slow-moving and divergences from the private sector can arise, not because of specific actions from the government, but by an inability to respond fast enough to developments elsewhere in the economy, either during business cycles or following structural changes in the economy.

## Labour market consequences of the misalignment of public and private wages

Using public wages to pursue multiple objectives generates a misalignment between public and private wages, which in turn translates into imbalances of demand and supply in the public-sector labour market, with potential negative consequences, whether public wages are above or below the market clearing wage (Garibaldi et al., 2021).

There are many negative consequences of offering jobs that are too attractive, besides higher spending and higher taxes. Two first-order effects are the spillover effects into private wages, and the effects on the queues for public-sector jobs, both tending to raise unemployment (Gomes, 2015). The effects on private wages work through bargaining and require some level of job mobility between sectors. As this is not the case for many workers that are attached to occupations that are exclusive to one sector or another, this effect might not be as large as one might think. Empirically, Afonso and Gomes (2014) analyse aggregate data in a panel of OECD countries for the period between 1973 and 2000, and find that a 1 per cent increase in public wages raises wages in the private sector by 0.3 per cent.

Recent papers have highlighted other problems of setting high public wages, especially if they are not uniform across different types of workers. Cavalcanti and Santos (2020) argue that higher wages might lead to misallocation of resources with a lower entrepreneurship rate. Chassamboulli and Gomes (2021) argue that they might foster the rent-seeking activities of unemployed workers trying to get a public-sector job through personal or political connections. Chassamboulli and Gomes (2023) argue they distort education decisions, while Gomes (2018) argues that they distort the decision of which type of workers the government hires, and hence affecting the skill-mix in the private sector. Garibaldi et al. (2021) demonstrates that high wages for workers with low qualifications might generate under-employment.

While the more natural problem might seem to be too high public wages, the consequences of too low wages might be even more severe. In such cases, the government will face recruitment and retention problems, and a shortage of qualified workers. Too much turnover destabilizes teams and effectively adds costs in recruitment, and training of workers. Ultimately, it might jeopardize the production of public goods and the functioning of the state.

## Public-private wage differentials in the UK

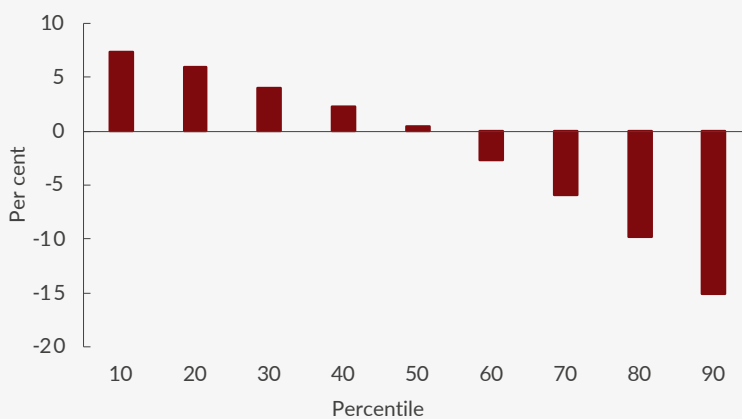
If we want a balance between public and private wages, the most important statistic to look at is public-private wage differentials. The simple comparison of the average wage across sectors is a poor statistic because the composition of employment is different in the two sectors. A better way is to estimate the public-private wage differentials from microdata, controlling for observable characteristics like education, region, age or gender, which provides a better answer as to whether the public sector pays higher or lower wages than the private sector for comparable workers.

The most recent estimates for the UK from Boileau et al. (2022), point to a reduction of about 10 percentage points since 1993 (figure D1). The average pay in the public sector is now below that in the private sector. This does not mean that public-sector wages are too low, because there are other compensating differentials: job security, pensions premium, or a work-life balance premium.

**Figure D1** Average public-private hourly pay differentials

Source: Boileau et al. (2022), using quarterly Labour Force Survey, controlling for observable characteristics. The dashed lines are the 95 per cent confidence interval.

While by last year average pay was at par with the private sector, the analysis must be more nuanced. Behind average pay, hides much heterogeneity in relative pay for different workers. Figure D2, shows the estimated premium at different points in the income distribution, for 2021-22. It illustrates a second fact that public wages are compressed relative to the private sector. This means that workers at the bottom of the income distribution, many with lower qualifications and experience, living in poorer regions, receive 7 per cent more in the public sector, while at the top of the distribution, usually, more qualified and experienced workers, living in richer regions, receive up to 15 per cent less in the public sector. In reality, the two types of inefficiencies co-exist for different workers. Some, are paid much more in the public sector, creating queues and wage spillovers in the private sector. Others are paid too low relative to their alternatives, which might put pressure on the recruitment and retention of highly-qualified staff in richer regions.

**Figure D2** Estimated public-private hourly pay differential by percentile in the conditional wage distribution, 2021-22

Source: Boileau et al. (2022), using quarterly Labour Force Survey, controlling for observable characteristics.

### What to do about public-sector pay?

Recent calls for wage moderation in the public sector to help fight inflation should not be listened to. While there is evidence of wage spillovers, the elasticities are too low for wage moderation to have a significant impact on inflation. It is a typical example of a wrong use of a policy, to address problems that are better suited with other instruments.

When thinking of public wages, we should look at relative wage comparisons, for different types of workers, in different occupations and regions. The data suggests, that at the top end of the distribution, public pay is significantly below private. Second, we should quantify the value of other benefits. For instance, Fontaine et al. (2020) place the value of public-sector job security in the United Kingdom between 0.6 and 1.6 per cent of the wage in normal times, and between 1.5 and 4.5 per cent during recessions.

Another good indicator of whether public wages are too high or too low are statistics like unfilled vacancies or queues for public-sector jobs, as first proposed by Krueger (1988). Unfilled vacancies are a symptom that wages are too low, while long queues are an indication to call for wage moderation.

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