

## Wages, inflation, and automatic cost of living adjustments

# Description

Ioannis Tirkides $^*$ 

Economists have no great answers to the question of how wages should change with inflation, and certainly the automatic cost-of-living adjustment mechanism is highly controversial. But there is broad agreement on the importance of wage growth, within the limits of inflation and productivity growth, averaged over a period of time. Inflation erodes purchasing power and reduces living standards. To ensure that the gains from growth are distributed as evenly as possible, real incomes should be rising in line with the economy over time, and income inequality should narrow from current high multiples. However, the experience of the last 20 years or so at the global level, has been the opposite, for a variety of reasons. The structural characteristics of our economies have changed. Technology shifted, affecting jobs and wages. Inflation exploded in 2022, and the war in Ukraine that same year exacerbated geopolitical uncertainties. There is a crisis in jobs and wages.

In this article, we discuss wage adjustments and inflation in the light of productivity developments, growth experiences and the resulting income disparities. We also discuss the automatic cost-of-living adjustment mechanism as an inadequate policy tool for the crucial economic and social problems of rising income inequality and job quality that we face today. Instead, alternatives should be sought, such as strengthening minimum wage and guaranteed income legislations, and making more effective use of the tax system for tax credits and targeted subsidies.

#### Defining the problem

The nature of work has changed over the last 20 or 30 years, and with it, jobs, their rewards, and their distribution. There have been two major and related trends. First, the distribution of total economic income, or GDP, between wages and profits has shifted in favour of the latter. Second, within wage income, the distribution has changed in favour of higher earners. The problem is how to reverse these trends to ensure decent income levels at the lower percentiles, without exacerbating inflationary pressures and inflationary expectations.

#### Wages versus profit distribution

The distribution of income in the EU has changed in the period following the global financial crisis of 2008-09, in favour of profits and at the expense of wages in most, but not all, cases. Europe as a whole is a more egalitarian society than the United States or the United Kingdom. For example, between 2009 and 2022, the share of wages in total income at the EU level fell very modestly compared with more pronounced movements at the country level. In Cyprus, for example, the share of compensation of employees in total GDP falls by 5.6 percentage points, from 47.8% in 2009 to 42.1% in 2022. The share of profits increased by 7.8 percentage points to 46.1% of GDP.

The diversity of like movements has to be seen in the light of starting positions, when in some instances, like Denmark's, the share of wages drops steeply but from a very high initial position. In other instances, like Greece's, it drops little if at all, but the starting position is relatively low. Yet in other instances, mostly in central and eastern European countries, the share of wages rises, but here per capita incomes are relatively low.

#### Wages and inflation

Turning to wages per se, the pattern of growth in the European Union, including Cyprus, shows a clear break after 2009. Wage growth was significantly slower in 2010-22 on

average than in 2001-09. We focus here on Cyprus, using data for total economy monthly earnings, consumer inflation, real and nominal GDP growth, employment, and productivity.

Ideally, averaged over a period of time, we would like wages to grow in line with inflation and also to capture some, but not all, of the gains from productivity, subject to the nature of inflation and other sectoral and regional differences. This will ensure that as the economy grows in real terms, real living standards also improve.

Over the period 2003-09, total compensation in Cyprus captured all inflation and all productivity gains, with a consequent reallocation in favour of labour wages and away from profits. Specifically, wages rose by 4.2 per cent per year, roughly in line with the sum of consumer inflation of 2.9 per cent and productivity growth of 1.2 per cent.

This was reversed over the 2010-22 period. Earnings growth was much slower at 1.3%, as was inflation at 1.2%. But while inflation was fully absorbed in the adjustment of earnings, productivity growth, at 0.9% per year, was not. This explains the reallocation of income in favour of profits. In 2020-22, earnings growth was 3.5% when consumer inflation averaged 3.4%. Over this period, therefore, earnings grew fully in line with average inflation over the period without capturing any of the productivity gains, although in 2022 earnings growth of 6.8% lags inflation of 8.4% and productivity of 2.8%.

#### **Income inequalities**

However, in addition to these changes in total wage growth, both in absolute terms and in relation to profits, the distribution of wages itself has changed in favour of the higher percentiles. Income or wage inequality remains high in Cyprus. We measure income or wage inequality using earnings data from the Cyprus Statistical Service for the percentage distribution of employees by monthly gross earnings for the period 2010-21.

From these data, we calculated that the earnings of the 10% of the highest paid employees were about 8 times the monthly earnings of the 10% of the lowest paid employees. Similarly, we calculated that the monthly earnings of the top 25% of earners were about 5 times the monthly earnings of the bottom 25% of earners. These are crude measures of income inequality but indicate the extent of the income discrepancy.

#### Automatic cost-of-living adjustments and their problems

If we were to apply an equi-proportional increase to these incomes, say 8% across the board, as would be the case with an automatic cost-of-living adjustment, these ratios of earnings multiples of 8 and 5 for the top and bottom 10% and 25% of employees by gross

income wouldn't change. But for every 1 euro of additional nominal income paid to the lower income groups, 8 and 5 euro respectively would be paid to the higher income groups of the 10% and 25% of employees.

If a cost-of-living adjustment were to be applied automatically and equally to all workers' earnings, it wouldn't change what we might define as relative income inequality, the multiples of income between the higher and lower percentiles of the distribution of wage income in the economy, but it would significantly worsen absolute income inequality, measured in terms of the money level of earnings.

At the same time, it would create distortions in the relationship between the pay of workers in different sectors and productivity. Different sectors have different levels of productivity and are affected differently by higher energy costs and inflation.

### The solutions

We first defined the problem as a disproportionate distribution of income between labour wages and profits, and a skewed distribution of wages in favour of the higher percentiles. The former occurs when productivity gains are absorbed almost entirely by profits. The latter results from structural changes in the labour market, where the majority of new jobs are low-productivity and low-paying.

Three steps can help reduce these problems and safeguard basic living standards. First, strengthen minimum wage and guaranteed minimum income legislation, extending it to all jobs and, in particular, linking the level to median income, ensuring that it rises in line with changes in the cost of living.

Second, use the tax system to provide tax credits or subsidies for targeted activities for low-income groups, to ensure that the tax burden on relevant income is as low as possible, if not zero, and that tax credits are net positive, subsidising specific expenditures over and above income, such as education or childcare, or even housing rental costs.

Third, these benefits should be pro-rated to cover part-time and gig-economy workers.

#### Conclusions

The link between wages and inflation is not easy to quantify, as it would depend on the sources of inflation between demand and supply drivers, sectoral differences in inflation and productivity, and the share of wages in total operating costs. Firms differ in their use

of inputs and in their labour versus capital intensity. All this requires discretion. It is clear that to improve living standards, real wages should rise in line with inflation and capture some of the productivity gains. But if, at the same time, we want to reduce the income differentials that underpin the rather large income inequalities, it is the lower income groups that need to be protected against inflation. The solution to our dual problem requires discretionary approaches in strengthening minimum wage legislation and in the use of the tax system for tax credits and allowances and for a system of activity-based income support. Automatic cost of living adjustments will only exacerbate absolute income inequalities and distort relative prices in the economy.

<sup>\*</sup>Ioannis Tirkides is the Economics Research Manager at Bank of Cyprus and President of the Cyprus Economic Society. Views expressed are personal.