

## Wages, employment and prices

*Cut real wages and you will create more jobs. So say the neoclassical economists who are behind the current push for more “flexible” labour markets. But are they contradicting themselves? Could wage rigidity be our main bulwark against deflation? And what happens if this barrier is breached?*

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The labour market and its reform are at the centre of theoretical and political discussions about how to achieve high employment. There are two basic approaches. The neoclassical paradigm – the present mainstream approach – assumes that cuts in real wages will increase employment. Reforming labour markets in order to make them more flexible is thus one of the key recommendations for improving employment and growth.

The Keynesian paradigm rejects the neoclassical view. According to Keynes, there is a hierarchy of markets. Economically, the most important is the capital market (including the banking system). In this market, the portfolio decisions of households, banks and enterprises and credit demand and credit supply are analysed. The capital market determines the interest rate and, together with profit expectations, the investment demand. Also, consumer demand can be affected, for example via changes in stock prices. Investment is the most important element of demand and at the same time the most important link between the capital and the goods markets. As long as there are free capacities in the goods market, demand determines supply.

The labour market is at the bottom of the hierarchy of markets. Demand for labour depends on the volume of production and

the technology. The latter depends on technological improvements and the distribution of income and is not predictable. This means that, on a theoretical level in the long run, there is no clear relation between the volume of production and the demand for labour. Labour demand will equal labour supply only by chance. Thus, unemployment is a normal state of affairs in a capitalist economy. Most importantly – in contrast to the neoclassical approach – in the Keynesian model, the labour market has no mechanism to create higher employment by itself. Capital and goods markets can be in equilibrium and at the same time the labour market can be in a stable situation of unemployment (Heine and Herr, 2002).

### Wage levels and prices in the Keynesian model

In the Keynesian approach, the wage level does not determine employment, but it is an important factor in determining the price level.<sup>1</sup> In explaining inflation/deflation, Keynes distinguished between cost inflation/deflation and demand inflation/deflation.

In the case of cost inflation, a mark-up pricing is assumed. If costs increase at the macroeconomic level, enterprises will in-

crease prices. They are able to do so as all enterprises are affected by the same cost increases. If costs decrease, the competition between enterprises leads to falling prices. It follows that even in a situation of low capacity utilization, increasing costs lead to higher prices. Unit-labour costs – i.e. the nominal wage rate divided by productivity – are an important cost factor. When the nominal wage rate increases by the same percentage as productivity, unit-labour costs do not change and have neither an inflationary nor a deflationary effect. When nominal wages increase by more than productivity, unit-labour costs increase and lead to an inflationary push.

There are other cost factors which are covered by prices. If, over a longer period, the level of interest rates increases, prices must increase. Given the interest rate, capital intensity determines interest costs.<sup>2</sup> In addition, cost-push inflation can occur if taxes increase (for example, value-added tax), if import prices increase (as the result of a devaluation), or if prices of natural resources increase.

Demand-driven inflation takes place if capacities are fully utilized and aggregate demand exceeds aggregate supply. In this case, the enterprise sector achieves an extra profit. A lack of demand not only reduces the quantity produced, it can also reduce the price level. In such a situation enterprises are confronted with losses.

In equilibrium and in the long term, the price level is determined by productivity, the nominal wage rate, the interest rate, capital intensity and some other cost factors. Productivity and capital intensity can hardly be controlled by economic policy. Also, the central bank is not completely free to set the interest rate. This means that nominal wages are of paramount importance for the price level. Unit-labour costs become the *nominal anchor* of a monetary economy.

At the centre of Keynesian wage theory is the recommendation of *productivity-oriented wage increases*.<sup>3</sup> Most of the world's central banks have a positive target inflation rate. If, for example, the target inflation rate is 2.0 per cent and the increase

in productivity 2.5 per cent, the nominal wage rate has to be increased by about 4.5 per cent in order to achieve the target inflation rate and thus become the nominal anchor of the price level.

According to Keynes, a typical inflation process develops as follows. Let us assume there is a long period of high investment which drives demand. If capacities are fully utilized and higher demand cannot be met by higher production, demand inflation will result. This leads to falling real wages. If workers do not accept a reduction in real wages and successfully increase nominal wages, both demand inflation and cost inflation will increase the price level. It is very likely that demand inflation and cost inflation will stimulate each other and lead to an accelerating wage-price spiral and a cumulative inflationary process. In such a situation, sooner or later a central bank will push up the whole interest rate structure. This leads to a fall in investment and demand deflation. At the same time, the stabilization crisis caused by anti-inflationary monetary policy reduces the growth rate and employment. Higher unemployment changes the situation in the labour market. Nominal wages do not increase as much as before and the cost inflation fades out.

For smaller countries in particular, external cost factors are important. If a country devalues its currency, import prices and the domestic cost level increase. As higher prices reduce real wages, it is very likely that a devaluation will trigger a wage-price spiral. The higher the inflation, the higher the likelihood of further devaluation. In such a situation, a country is caught in a devaluation-inflation spiral which is combined with a wage-price spiral (cp. Herr, 1997; Herr and Priewe, 2001).

### Wages and positive macroeconomic regimes

It is the function of central banks to guarantee a stable currency. Central banks potentially always have the power to reduce inflation rates by a policy of high interest

rates. But the problem is that the short-term costs in reducing inflation may be very high. Restrictive monetary policy will create a collapse in investment, a lack of demand, demand deflation and enterprise losses. The stabilization crisis leads to low or even negative growth rates and increasing unemployment.

If there is no inflationary pressure, there is no need for restrictive monetary policy. This is the point where a labour market and *incomes* policy becomes very important. In a market economy, it serves to establish a nominal wage anchor. If an incomes policy establishes a productivity-oriented wage development, the central bank does not have to implement a restrictive monetary policy in order to stabilize the price level. There is no guarantee that a productivity-oriented wage policy will lead to higher growth and higher employment. But such a policy improves the macroeconomic conditions and increases the probability of higher growth rates and higher employment.

Especially in a situation of high employment, it can become difficult to follow a productivity-oriented wage policy. In such a situation, the bargaining power of unions is high and this may lead to higher nominal wages. Even if unions accept moderate nominal wage increases in a situation of high employment, high demand in the labour market can lead to wage drift and cost inflation. The more a country can stabilize wages in a situation of high growth and high employment, the higher is the likelihood of continual long-term growth. A successful interaction between nominal wage development (unions) and monetary policy (central bank) is of paramount importance for a prosperous economic regime.

A functional interrelation between nominal wage developments and monetary policy is only one element of a successful economic regime. As wages can never be a compensating factor for other destabilizing sources, incomes policy can be a force for stabilization only when the other macroeconomic markets are in a stable constellation. This shows the limited role of labour markets in the hierarchy

of markets in the Keynesian paradigm. If inflationary pressure comes from other sources, for example from a high budget deficit financed by the central bank, a functional wage policy is not possible. In such a situation, nominal wages have to be increased in order to prevent an erosion of real wages. Furthermore, nominal wages cannot normally be kept stable when the domestic currency is devalued by a high percentage and imported goods make up a large part of wage goods.

It has become very fashionable to calculate a so-called NAIRU (non-accelerating inflation rate of unemployment). The NAIRU is the unemployment rate that keeps the inflation rate at a certain level, for example at a low percentage target inflation rate. In some respects, the NAIRU concept fits into Keynesian thinking, as a certain rate of unemployment may be necessary to prevent an inflationary wage-price spiral.<sup>4</sup> The better an incomes policy functions, the lower the NAIRU. It should be clearly understood that not every empirically measured unemployment rate is identical with NAIRU. In the Keynesian model, capital and goods markets can create unemployment rates which are much higher than the unemployment rate necessary to prevent a wage-price spiral. In Europe, for example, unemployment rates since the 1970s cannot be explained by excessive wage pressure. The problem was that growth rates were too low because demand – and especially investment demand – was too low. It would be particularly misleading to use the NAIRU concept to explain the high unemployment rates in developing or transitional countries.

The power of central banks to control the price level is asymmetric. So far, we have pointed out that central banks (at least potentially) can always successfully fight against inflation. For central banks, it is much more difficult to prevent, or fight against, deflation. The limited power of central banks to stop deflation becomes obvious if low interest rates do not stimulate investment demand and fail to increase the money supply. If expectation and the state of confidence are negative,

there may be no interest rate low enough to stimulate investment and prevent a permanent lack of demand. The crucial barrier against cumulative deflation is the nominal wage anchor. If this dyke breaks and nominal wages start to fall, a deflationary wage-price spiral and a deflationary demand constellation will stimulate each other and lead to a cumulative deflationary process. Any sharp deflation leads into a deep depression. Labour market institutions which help to establish a productivity-oriented wage development and especially prevent wages from falling are extremely important for the stability of a market economy. Rigidity of wages is desirable in order to stabilize the price level and it is not a disruptive factor which prevents full employment. If the central bank is responsible for preventing inflation, then unions or labour market institutions are responsible for preventing deflation.

### Minimum wages

Where unions are weak, minimum wages become important. Minimum wages that can be enforced can prevent a deflationary wage-price spiral. They set a floor for nominal wage cuts and compensate for weak unions and an underdeveloped system of wage negotiations. If the level of minimum wages is substantially lower than the nominal wage of low-paid workers, it cannot prevent the general nominal wage level from decreasing. On the other hand, if a minimum wage is so high as to increase the wages of the group of low-paid workers, they may compress the wage structure. As a rule, minimum wages should not be much lower than the wage level of the least-paid groups of workers. As the wage level is different in different industries, minimum wages should be defined for each industry. In an inflationary situation, fixed minimum wages quickly become ineffective as the general wage level increases and a considerable gap develops between the wage level of low-paid workers and the minimum wage. Minimum wages should be adjusted in line with the

general wage level. Changes in minimum wages according to this rule will not set off a wage-price spiral. At the same time, they will prevent a growing gap between low-paid work and the minimum wage. On the other hand, if average nominal wages fall, the level of minimum wages should be kept unchanged.

### Different wages in the same industry – an example of changing the wage structure

There are many ways to make the wage structure more flexible. Here only the effects of different wages in the same industry are discussed. The basic law of one price dictates that all companies in an industry have to pay the same prices for all inputs – for oil, computers, pencils, drilling machines, etc. and also for labour. Let us analyse what happens if the law of one price is violated and labour inputs have different prices for different companies.

At least in the short term, perspective wage differentiation within one industry can protect employment. This is the case if less productive companies can survive by paying lower wages. The price of this is lower nominal and real wages for employees in companies with lower productivity. For an economy, this employment strategy amounts to a policy of reducing average productivity in order to protect employment. The big disadvantage of such a policy is the reduced incentive to restructure firms and to innovate. Lame ducks are subsidized by labour and innovative enterprises are punished, as they have to pay higher wages and are not permitted to expand in accordance with their competitive power. One of the most dynamic elements of capitalism is the quest for extra profits through innovation, new management methods, etc. Wage differentiation within one industry hinders the process of creative destruction, as Schumpeter (1942) called it, which is a basic element of capitalism.<sup>5</sup>

For market economies, wage negotiations on the basis of the same wage level for all firms in an industry are functional, as

they enforce the law of one price which in general should also hold for labour. Only in special cases and for a limited period of time should the law of one price for labour be violated. It can make sense to reduce the wage costs for individually underperforming companies for a certain time in order to support restructuring. This may be desirable if the bad performance of a company does not lead to an immediate expansion by other companies and the development of an industry is path-dependent.

### Shortcomings of the neoclassical model

The neoclassical model usually applies a smooth labour supply function which increases with higher real wages and a smooth labour demand function which decreases with higher real wages. Flexible real wages lead to market clearing – as in a normal goods market – and full employment.

One conclusion of the Keynesian approach is that real wages do not depend on nominal wages. “The traditional theory maintains, in short, that the wage bargains between the entrepreneur and the workers determine the real wage” (Keynes, 1936, p. 11). But: “There may exist no expedient by which labour as a whole can reduce its real wage to a given figure by making revised money bargains with entrepreneurs” (Keynes, 1936, p. 13). Reductions in wages do not lead to higher employment, they lead to deflation and to a destabilization of the economy.

There are more problems with the neoclassical analysis of the labour market. The smooth functions are not based on neoclassical microeconomics, they are assumed. In complete harmony with the neoclassical model, a more differentiated supply function for labour is possible. When real wages become very low, any further reductions in real wages may increase the supply of labour. In this case, people have to work more to survive. This phenomenon could historically be noticed during the industrial revolution. In many transitional and devel-

oping countries we can see a similar development. The phenomenon is also known in developed countries in the group of low-paid workers. On the other hand, increasing real wage rates do not in any case increase labour supply, as leisure time becomes more and more precious for households.

The smooth demand function for labour is based on dubious methodical grounds. It depends on a macroeconomic production function. Such a function suggests that the enterprise sector of a country can be boiled down to one large company using labour and one capital good for production. The striking fact of this function is that it implicitly assumes that there is no interaction between companies and no interaction between different markets. A lengthy discussion since the Second World War has shown that the inverse relation between real wages and labour demand in the neoclassical model depends on the existence of only one capital good. Two or more capital goods destroy the relation between lower real wages and higher labour demand. It is a scandal that many – though not all – neoclassical writers suppress this debate.

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## Notes

<sup>1</sup> The analysis follows Keynes (1930).

<sup>2</sup> It could be argued that wages make up only a small part of total costs and thus the price level does not change by the same percentage as unit-labour costs change. This argument is false as higher unit-labour costs increase the price level of capital goods. In the simple case when only wage costs and capital costs exist it can be shown that a certain percentage change in unit-labour costs leads to the same percentage change in the price level (cp. Heine and Herr, 2002).

<sup>3</sup> Statistically, productivity drops during recession as companies cannot immediately dismiss

people, and it increases during an upswing as companies use the existing stock of workers to produce more. Thus productivity-oriented wage policy should follow the medium-term trend of productivity changes.

<sup>4</sup> NAIRU is often and wrongly identified with the natural rate of unemployment. The latter is the employment rate that the real sphere (real wage rigidity, low mobility of labour, mismatch of labour demand and supply, etc.) in the neoclassical world creates. The neoclassical model explains inflation by excessive money supply and not by nominal wage increases. But nominal wage increases are behind the NAIRU concept.

<sup>5</sup> Karl Marx also stressed this point.

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