
**DEFLATION**

Each month, the prices of several consumption goods and services (from raw materials like oil or steel to apples, haircuts and flight tickets) are computed in order to calculate indicators like the consumer price index or the GDP deflator. When the rate of growth of these price indexes is negative, the economy is said to be in a period of deflation. More precisely, deflation characterizes a period of *continuous* and *general* decrease in the prices of goods and services. Thus, if the decrease concerns only few commodities or if the general decrease is only temporary, there is no deflation. Deflation is thus the opposite of *inflation* and it must not be confused with disinflation: that is to say, a period of general and durable deceleration of price rise. The classical example of massive deflation having huge international consequences for production and employment is the Great Depression that started in the USA. From 1929 to 1932, the basic commodity price decreased by 52 per cent in the USA, 38 per cent in France, 34 per cent in England.

Deflation has a double impact on the economy via its effects on the production and the distribution of wealth, its major effect being, contrary to inflation, on the first one (Keynes 1923). In order to understand why, it is necessary to remember that we live in what Marx and Keynes called a *monetary production economy*. The main actors of this kind of economy are entrepreneurs and the members of the financial community (bankers or actors in the financial markets). These actors are engaged in productive and speculative activities that induce them to borrow or to lend money today in expectation of future money inflows. This has two consequences: first, borrowers are committed to provide lenders with regular payments (debt services, dividends, rents, etc.) whatever their actual cash inflows; second, lenders depend, for their own activities, on the regular payments of borrowers (unless they can securitize their assets, which is more and more the case today for several assets like home and commercial mortgages, student loans, auto loans and many others). Thus each economic activity starts with money and ends with money. The financing is provided by lenders, and its amount depends on the value and quality of the collateral assets provided and on the convention existing inside the financial community. This convention determines creditworthiness and what is considered as a safe lending behaviour (normal ratio of liquidity, normal debt ratio, normal margins over the value of collateralized assets and so on).

One can see that there is an interlinkage of financial relations that rests on what entrepreneurs and the financial community
think about the future: the income of lenders depends on the healthiness of borrowers’ activities and the latter depends on the realization of expectations within an acceptable margin of error. What, then, are the effects of deflation, especially if its level is higher than expected? First, entrepreneurs and other borrowers are off their expected cash inflows by a large amount and, thus, may have problems to honour their financial commitments. They may then ask for a renegotiation of outstanding debts but, if lenders are themselves under pressure of their own creditors, lenders may refuse to accept to do this and, on the contrary, may demand the fulfilment of financial commitments. Borrowers have then only two solutions to avoid bankruptcy: to sell assets as fast as possible, or to decrease costs by laying off workers and/or demanding more productivity. This goes first via selling output at a lower and lower price, which, again, contributes to deflation, and, second, if not enough, by selling other assets (financial assets, machines, etc.). At the same time the laying-off of workers shrinks aggregate demand, which make things worse for entrepreneurs. On the other side, lenders, because of the decrease in value of collaterals and the incapacity to get money in inflows in an amount large enough to pay back their own creditors (some of them being the new unemployed that have to rely more on their savings to survive), may cut loans and themselves start to liquidate assets. The financing of activities, and notably productive activities, then stops at a moment when borrowers crucially need money, which may lead to the bankruptcy of many activities. One may then end up with a situation called debt-deflation (Fisher 1933; Minsky 1986): deflation creates difficulties to service debts which themselves contribute to generate deflation, and so on.

One can see that deflation makes more difficult for borrowers to repay their debts because it increases the real value of debts. The borrowers thus end up paying back more than they expected, and this also contributes to make them reluctant to pursue their own activity. When this redistributive effect concerns entrepreneurs, employment and production suffer.

The sources of deflation are multiple. Orthodox economists agree that deflation is mainly explained by a decrease of the money supply, which decreases demand for goods and services and so generates deflation. This is the basic result of the quantity theory of money derived from a particular interpretation of the following identity:

\[ MV = PQ \Rightarrow P \equiv MV/Q \]

The general price level \( P \) depends on the money supply \( M \), the velocity of money \( V \) that is supposed to be constant because of habits of payment), and \( Q \) the level of production (which is also constant because the economy is supposed to be at full employment). Thus, as soon as \( V \) and \( Q \) are constant, \( P \) can only move if \( M \) changes.

However, this explanation of general price level is criticized by many economists like Keynes and his followers (Minsky 1986). Their macroeconomic explanation of prices is based on national accounting:

\[ PQ = W + \Pi \Rightarrow P \equiv wN/Q + \Pi/Q \]

\[ \Rightarrow P \equiv w/AP_L + \Pi/Q \]

The income approach to the GDP identity shows us that the GDP deflator depends on several elements: the distribution of income in the society \( wN/Q \) being the share of wage and \( \Pi/Q \) being the share of profit), the productivity of factors of production and notably of labour (\( AP_L \): average productivity of labour). The explanation of deflation is not based mainly on money for those authors: class conflicts, innovation in the processes of production (better organization, better formation of workers, invention of new machines, etc.), are far more
Another explanation of deflation, which is compatible with the preceding one, can be derived from the debt-deflation process described above. Deflation results from an excess of optimism by entrepreneurs and bankers that led them to implement activities that are more fragile financially (expectation of profits are more uncertain and more sensitive to external shocks like changes of monetary policy, temporary changes in the patterns of consumption, re-evaluation, increases in the price of raw materials, etc.). Here the deflation bias has its roots in an excessive monetary creation in the past! The total opposite to the orthodox macroeconomic explanation of prices!

Therefore, the usual explanation based on monetary sources of deflation is not sufficient and not general. Moreover, once the possibility of debt-deflation exists other questions become relevant: why should we not be concerned with the variation of prices other than consumption goods? Should not we include financial assets, real estates and other investment goods in the measure of deflation (or inflation)? A regulation of these assets, in addition to the current regulation of the prices of consumption goods, seems more than reasonable. This question is, however, very controversial among economists.

References and further reading


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DEINDUSTRIALIZATION

Deindustrialization has been one of the defining features of the world’s most advanced economies for a number of decades. It is presently a topic of growing interest and concern in a number of newly industrializing countries as well. As a subject of academic and policy research and debate, deindustrialization is typically defined as involving the decline of manufacturing employment relative to employment in other sectors of the economy. By this definition, deindustrialization has been widespread, and often dramatic, across the global North in recent years. In the United States, for instance, manufacturing’s share of employment declined from 26.4 per cent of civilian employment in 1970 to 14.7 per cent in 2000. In the United Kingdom, employment in manufacturing declined from 34.2 per cent to 17.1 per cent of civilian employment across the same period (OECD 2002).

The phenomenon of deindustrialization has given rise to a lively debate over its causes and consequences. It has often been viewed with considerable apprehension and has regularly been invoked as a leading ‘suspect’ in the twin ‘mysteries’ of rising income inequality in the USA and the UK and rising unemployment in continental Europe.

Accounts of the experience of the last third of the twentieth century vary widely. An early theme in the literature was that deindustrialization was the result of especially poor industrial performance; of poor product quality, spiralling labour costs, destructive conflicts between labour and management, poor corporate and government policy. This diagnosis appears to have originated in the literature devoted to dissecting the causes of the ‘British disease’ or ‘Englanditis’ of the 1960s and 1970s. It has re-emerged regularly since then in a number of other national literatures. In the 1990s, attention turned to the role of glo-