Demand-constrained versus supply-constrained systems

By Prabhat Patnaik January 5, 2020 – *IDEAS*

The idea is an old one, but the Hungarian economist Janos Kornai clearly conceptualized it, by drawing a distinction between a "demandsystem" and a "resourceconstrained constrained system". A demand-constrained system is one where employment and output in the system are what they are because of the level of aggregate demand is what it is; if the level of demand increases then output and employment in the economy will increase, with very little increase in the price-level. By contrast, a "resource-constrained system", which can also be called a "supply-constrained system", is one where an increase in the level of aggregate demand, say because of larger investment or larger government expenditure, does not have the effect of raising output and employment in the economy, but rather increases the price-level (such an increase however may be repressed through generalized price-control and rationing).

Put differently, a demand-constrained system is characterized by the existence of unemployment, unutilized capacity, and unsold stocks of raw materials (or raw materials that can be obtained when required). A supplyconstrained system by contrast is one where such reserves of labour, equipment and raw material stocks do not exist, and a rise in demand, if it occurs, leads not to any increase in supply but rather to an increase in prices (which may of course be repressed). Clearly it is better for any system to be supplyconstrained, for then it is producing to its maximum potential, rather than being demandconstrained, for in the latter case its production potential is remaining unutilized.

Capitalism is essentially a demand-constrained system. It is always characterized by unemployment; this unemployment may be larger or smaller, but it never disappears. Or as

Marx had put it, a reserve army of labour is a perennial feature of capitalism. Likewise, a capitalist economy rarely produces to full capacity. Even in the most pronounced of booms there is always a certain amount of unutilized capacity at the top of the boom; it is only in times of war that a capitalist economy reaches full capacity production but not otherwise. Similarly, employment and output under capitalism have scarcely ever been constrained by a shortage of raw materials. Historically raw materials have been obtained whenever required by squeezing the third world's raw material absorption. Hence capitalist economies experience a limit to their output that comes from the side of aggregate demand.

By contrast, the socialist economies that existed were invariably supply-constrained. There was labour shortage rather than unemployment; and unutilized capacity (except to the extent that firms may have deliberately wanted to hold some in order to cope with contingencies) scarcely existed. The big contrast between classical capitalism and classical socialism, a contrast of great significance and relating to the immanent tendency of each system, lay in this: classical capitalism was demand-constrained while classical socialism was supply-constrained.

To be sure there may be occasional specific bottlenecks even in a demand-constrained system and there may be occasional undesired excess capacity in a particular sector even in a supply-constrained system; but this should not make difference our to overall characterization of the systems. The specific bottleneck in a demand-constrained system can be overcome through specific measures in the event of an increase in aggregate demand that raise overall output would still

employment; and likewise the specific excess capacity in a particular sector does not mean that *overall* output and employment can be expanded with impunity through an increase in aggregate demand.

One implication of this characterization must be noted. There used to be much talk at one time about the fact that while capitalism entailed an allocation of the economy's resources that was "efficient", in the sense that a state of affairs was invariably reached through the functioning of markets where the production of more of one good would necessarily entail the production of less of some other good (s), socialism was characterized by inefficiency in this sense because it lacked markets. Even leaving aside comparisons, it was claimed, and often is to this day, that capitalism allocates resources 'efficiently" through the market mechanism.

This claim however is completely invalid once we recognize that under capitalism resources are never fully utilized. Even if we accept for argument's sake that 80 per cent of resources, say, are so utilized that producing any more goods at the margin, using these 80 per cent of resources, is impossible, this fact does not make the system "efficient" if 20 per cent of resources are lying idle. The concept of "efficiency" in short requires as a necessary condition that resources be fully utilized; and if this is not the case then the system cannot be called "efficient". No demand-constrained system can be efficient and this is true of capitalism which is a demand-constrained system.

In India and several other third world countries, *dirigiste regimes* were set up after decolonization which functioned in a manner such that while industry was characterized by unutilized capacity, the level of foodgrain production (though greatly increased compared to the colonial period) constrained the utilization of this capacity. Any increase in demand for industrial goods, through larger

government expenditure for instance, would cause inflation in the foodgrain sector; and this is what held back such an increase. Such economies therefore were supply-constrained systems but characterized by unutilized capacity in the industrial sector.

This "mixed" behaviour of theirs was in keeping with their being "mixed" economies. A socialist economy would have got rid of such unutilized capacity through proper planning, but not so these "mixed" economies which were basically engaged in developing capitalism though with substantial state intervention: cut-back in industrial a investment in *such* economies for getting rid of unutilized industrial capacity would have aggravated unutilized industrialized capacity.

With the introduction of neo-liberal policies in such economies, they are now closer to classical capitalism, and are no longer the earlier "mixed economy". They now resemble typical demand-constrained systems, having not only unutilized industrial capacity but also substantial unsold foodgrain stocks which often have to be exported at throwaway prices. The proximate constraint on their employment and output arises not because of shortage of foodgrains but because of a shortage of demand, including foodgrains themselves, owing to the limited purchasing power in the hands of the working people. This is not alleviated through larger state expenditure, unlike under the regime, because earlier *dirigiste* opposition of international finance capital to larger fiscal deficits and to larger taxes on the rich (which are the only means of financing state expenditure that would raise aggregate demand).

This finance-imposed constraint on state expenditure is sometimes passed off as an objective constraint arising from an absolute scarcity of fiscal resources. This is completely wrong. There cannot possibly be a shortage of fiscal resources in a demand-constrained

system. In a demand-constrained system even if state expenditure is financed entirely through a fiscal deficit, this can have no inflationary consequences since the economy has unutilized resources. True, a fiscal deficit has the effect of putting profits in the hands of capitalists and thereby increasing the inequality in wealth distribution (since a part of these profits are saved and add to the capitalists' wealth). To keep this inequality in check, these additional profits arising from larger state expenditure have to be taxed away (in which case there is no rise in the fiscal deficit); but such a profit tax-financed state expenditure would still leave post-tax profits exactly where they were before

state expenditure increased. Larger state expenditure in other words would simply use up the unutilized resources that exist in the economy without reducing anyone's share. The existence of such unutilized resources means in effect that one can get "something for nothing".

A demand-constrained system cannot possibly have a shortage of fiscal resources for financing larger state expenditure. To suggest otherwise amounts to diverting attention away from the role of international finance capital. It amounts to taking the constraint imposed by international finance capital as an absolute constraint.