Chapter 61: Interventionist supply-side policies

(2.6)

<table>
<thead>
<tr>
<th>Key concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Investment in human capital</td>
</tr>
<tr>
<td>• Policies encouraging investment (physical capital)</td>
</tr>
<tr>
<td>• Infrastructure</td>
</tr>
<tr>
<td>• Industrial policies</td>
</tr>
</tbody>
</table>

| Investment in human capital | • Explain how investment in education and training will raise the levels of human capital and have a short-term impact on aggregate demand but more importantly will increase LRAS |
| Investment in new technology | • Explain how policies that encourage research and development will have a short-term impact on aggregate demand but more importantly result in new technologies and will increase LRAS |
| Investment in infrastructure | • Explain how increased and improved infrastructure will have a short-term impact on aggregate demand but more importantly will increase LRAS |
| Industrial policies | • Explain that targeting specific industries through policies including tax cuts, tax allowances and subsidized lending promotes growth in key areas of the economy and will have a short-term impact on aggregate demand but more importantly will increase LRAS |

Supply-side policies are not the sole domain of neo-classically orientated free market policies, yet care should be made to distinguish market-based policies from interventionist ones. The 1980s and '90s saw increasing use of government empowerment to influence the supply side of the economy. Generally speaking, governments intervened on factor markets by trying to enhance the attractiveness and availability of labour, i.e. the supply of labour, which also had the secondary effect of increased demand for labour over time.

- **Investment in human capital**
  
  Basically, any government policy causing an increase in labour market participation increases the supply of labour. *Figure 61.1* shows how various forms of *interventionist supply-side policies* – notably education, (re-) training and greater labour mobility – increase the aggregate supply of labour. This in turn increases the potential output in the economy, LRAS.
Figure 61.1 Intervention on the supply-side for labour

By increasing the skills base of labour, decreasing the search costs of both employers and job searchers and creating incentives for increased labour mobility, there will be an increase in the aggregate supply of labour, shown in figure 61.1 as the shift in the aggregate supply of labour from \( ASL_0 \) to \( ASL_1 \).\(^1\) Assuming that wages adjust relatively quickly – e.g. no downward stickiness of wages – the real wage rate falls to \( W^* \) and unemployment decreases from \( U_0 \) to \( FE \) - the natural rate of unemployment.

Investment in human capital as a result of government intervention (see Chapter 49) takes on some of the following range of interventionism:

- Government grants/subsidies to employers hiring youths, older workers and long term unemployed
- Entrepreneurial incentives such as soft loans and subsidised rent for start-up companies and R&D loans
- Government tax incentives to firms which invest in education/training amongst employees risking redundancy
- Government/communal re-training schemes
- Improved information for job-seekers by way of government employment agencies, on-line job seeking and help/advice in job seeking
- Regional support and outsourcing of government agencies to depressed areas
- Specific youth training programmes and subsidies for firms hiring under-18s (which will give these young people much needed experience to gain ‘real’ jobs)

It bears commenting on the rather weak conclusions as to whether government re-training and education programmes in fact have much of an effect! Recent findings indicate that while focused, small-scale government training schemes might have some effect, there is no general rule that increased government spending on training schemes has any significant effect on unemployment and long run output.\(^2\) Having said that, figure 61.2 corroborates this to a certain

\(^{1}\) It is highly plausible (= believable) that these same policies, together with hiring incentives for firms, might ultimately also result in an increase in demand for labour.

\(^{2}\) See for example “The Role of Training and Skills Development in Active Labour Market Policies”, Institute for Employment Studies, University of Sussex, 2009
extent, where several of the Scandinavian countries (Norway, Sweden and Denmark) using large-scale government supply-side policies on the labour market generally have a better unemployment record.³

**Figure 61.1 Correlation between labour market spending and employment (2005)**

![Figure 61.1](image)

(Source: "The Role of Training and Skills Development in Active Labour Market Policies", Institute for Employment Studies, University of Sussex, 2009, page 6.)

(Rory: please put “Labour market policy” rather than LMP and colour code the economies somehow, e.g. the encircled US/UR/NZ…etc in, em, red and the others encircled in green.)

- **Policies encouraging investment (physical capital)**

Interventionist policies to encourage investment and start-up firms commonly include such measures as:

- Subsidies for start-up firms
- Tax breaks for firms investing in physical capital
- Tax holidays (as in Ireland) for foreign firms investing in the economy (FDI inflows)
- Soft loans (loans with lower-than-market interest and/or longer repayment times) for firms needing to invest

All too often students see the similarities between simple demand (e.g. demand for a single product) and aggregate demand (e.g. the sum of all product markets) and draw the conclusion that – as in the simple supply and demand model – aggregate demand does not influence aggregate supply. This is in fact erroneous, since it is quite possible that the investment component of aggregate demand indeed will serve to cause a change in both short run and long run aggregate supply over time. **Figure 61.3** illustrates an economy initially in long run equilibrium, point A.

³ Though the regression coefficient is less than 0.4.
**Figure 61.3 LRAS effects due to increased physical capital**

**A to B:** Investment increases and AD shifts from $AD_0$ to $AD_1$, taking the economy from point A to point B.

**B to C:** In due course, the effects of increased capital will increase productivity, causing aggregate supply to increase from $SRAS_0$ to $SRAS_1$; point C.

**Increase in LRAS:** The increase in productivity and output capability causes LRAS to increase from $LRAS_0$ to $LRAS_1$, creating new long run equilibrium at $Y_{NRU_1}$.

This is a case where a change in a component of aggregate demand, *investment expenditure*, can directly influence both aggregate demand and aggregate supply over time. Other possibility include the lowering of income taxes which at first increases aggregate demand due to larger disposable incomes and increased consumption, which in turn serves to increase aggregate supply in the long run when households’ incentives to work more kick in. Increased infrastructure investment also has the same effect.

- **Infrastructure**

When economists use the term infrastructure, they are referring to the ‘internal skeleton’ which holds an economy upright and moving. Infrastructure provides the basis for an economy to function, and consists of the system of road networks, telecommunications networks, sewage facilities, water supply, electricity and power sources, financial/education/health system, public transportation networks and ports/harbours or other international points of trade access. An increase in infrastructure will (as in the examples referring to figure 61.3) initially increase aggregate demand.

Infrastructure is vital to a well-functioning economy and the effects of investment here are hard to overestimate. It allows all the factors of production in a country to be productively utilised: labourers can get to their jobs; produce can be transported to urban areas from rural areas; power, water and information so vital to firms can be transported; and enhanced market accessibility increases the level of competition in an economy.

Allow me a moment of patriotic breast-beating for my wonderful home country of Sweden. The Swedish government has consistently and generously built up a telecommunication structure of broadband which basically grants the entire population access to high-speed internet. This has made Sweden the most competitive digital economy in the world according to both The Economist’s ‘Digital economy ranking 2010’ and the World Economic Forum’s ‘Global
Information Technology Report 2009-10”. This seriously switched-on and hooked-up little country of 9.3 million people has quite a few global success stories to its credit such as Spotify and Skype. Most of the Swedes would agree that large scale internet access, focused IT classes in school together with government investment in infrastructure is at the heart of the success.

- **Industrial policies**

Finally, it is common for governments to take an active role in helping industries via government legislation and allocation of funds. The following industrial policies can increase long run potential:

- R&D grants to firms together with government support for R&D units linked to state universities
- Regional support for fledgling industries
- Relocation subsidies for workers to seek and take jobs in other regions
- Active promotion of Home Country industries and products via trade legations at embassies abroad

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**POP QUIZ 3.4.2: SUPPLY-SIDE ISSUES**

1. Show in a diagram how supply-side policies might lead to deflation. What might cause this and is it “bad”? (Changed this question…need to change the answer.)

2. Why do neo-classical economists claim that demand-side policies do not increase real long run output? Illustrate your answer with a suitable diagram.

3. Explain how supply-side policies can be applied to the labour market.

4. What would the supply-side effects be of an increase in a) income taxes; b) tax breaks for small businesses c) fewer subsidies to ‘sunset industries’ (industries experiencing permanent decline in demand for their goods) in regions with high unemployment rates?
Summary and revision

1. Governments can intervene in **human capital** via subsidies/grants/tax breaks to firms which train labourers; implement government re-training and education schemes; centralised job centres and employment agencies; and regional support schemes.

2. Interventionist supply-side policies for **physical capital** can consist of tax breaks for investment; soft loans and subsidies.

3. Governments can enhance long run potential output by increasing the quality and quantity of **infrastructure** such as roads, bridges, ports, telecoms and water supply.

4. **Industrial policies** can actively promote R&D for private firms and state universities and aid the relocation of firms and workers from sunset to sunrise industries.