The economic impact of local content requirements

Local content requirements (LCRs) are policies imposed by governments that require firms to use domestically manufactured goods or domestically supplied services in order to operate in an economy. While LCRs have been around for decades, recent years have witnessed a substantial increase in the use of these measures to try and achieve a variety of policy objectives, such as to meet employment, industrial or technological development goals. While LCRs may help governments achieve certain short-term objectives, they undermine long-term industrial competitiveness.

Despite the long-standing and predominately negative evidence of the impact of LCRs on trade, they continue to play a significant role in trade policy today. Since the financial crisis of 2008, more than 140 new local content measures have been put in place by governments largely in an effort to improve domestic employment and industrial performance.

New work undertaken by the OECD provides evidence of the detrimental effects that LCRs can have on the imposing country’s own economy. While most empirical studies have focused on the long-run inefficiencies in the affected sector that arise as a result of LCRs, the OECD study highlights the costs that are subsequently imposed on other sectors in the economy, differentiates impacts on intermediate versus final demand, and examines the decline in trade in third-party economies.

By analysing a measurable subset of the trade-related LCR measures using the new OECD METRO trade model, the OECD shows that LCRs have caused a decline in global imports and total exports in every region (see Figure 1). Imposing economies lose international competitiveness, as measured by the reduction in exports in sectors not directly targeted by the LCR. Further, as sectors that benefit from the LCR consume more domestic resources, other sectors are forced to reduce production, or increase imports, leading to a concentration of domestic economic activity. This process ultimately undermines the growth and innovation opportunities that come from a diverse economy.

**Total imports and total exports decline in every region as a result of LCR policies**

The LCRs examined in this study are primarily targeted at inputs with the vast majority of the reduction in trade flows affecting trade in intermediate inputs. A LCR on cars, for example, might require 60% of a car’s parts to be produced locally, rather than from more efficient imported inputs. This negative outcome for trade in intermediates is particularly alarming when considered in the context of Global Value Chains (GVCs). The results of the OECD study imply that LCRs can lead to increasing economic isolation, forfeiting important gains that could be available from GVCs. Reducing trade in intermediates in particular, threatens to lower productivity and reduce connectivity across the globe. While final goods are also affected, the analysis shows that 80% of the decline in trade arising from these policies affects intermediate goods. Ironically, it is only through the opportunity to shift from local to international markets that households and other non-LCR targeted sectors are able to mitigate the losses inflicted by the LCR policies.

![Figure 1. Percent change in total exports due to LCRs](source: METRO)
Imposing LCRs raises domestic production costs to the industry targeted and undermines domestic economic diversification

In all but one of the cases examined, domestic prices of goods were shown to increase in the sector targeted by the LCR. The increase in production costs leads to an increase in output prices. The increased prices in turn raise costs to producers further along the production chain, reducing the competitiveness of industries across the economy. Thus, LCRs reduce an economy’s international competitiveness, with exports in non-targeted sectors falling. For example, in one country, an LCR on motor vehicles that required 60% of parts to be domestically produced was found to have caused exports in all other sectors to fall (see Figure 2). The size of these efficiency losses in the marketplace are proportional to the additional domestic inputs required under the LCR.

Figure 2. Change in exports in other sectors following a motor vehicle LCR

Source: METRO

Higher domestic production costs also affect other non-targeted industries that compete for similar inputs, as well as for households that buy the final product. The higher domestic prices make imports relatively cheaper. As neither of these groups is directly targeted by the LCR, they can access international markets to soften the policy’s effect. Consumers will seek out less-expensive imported final goods, and in some instances, the increase in household purchase of imported products causes an increase in the overall sector imports in the presence of LCRs, contrary to the expected effect of the policy.

In order to avoid increased costs due to more expensive domestic goods in a sector targeted by an LCR, firms in other sectors are likely to substitute away from now more expensive domestic inputs to comparatively cheaper foreign inputs. For example, one LCR imposed on the communications sector saw, imports to all other sectors in that economy increase for the targeted communications inputs (see Figure 3).

The impact of any LCR is also affected by the underlying economic conditions in the domestic economy. If the industry is currently sourcing a large part of their inputs from the domestic economy, assuming no significant supply constraints, the impact of the LCR on both the sector and the overall economy would be small. This is shown to be the case in many measurable LCRs which target small input shares. Those where import shares are relatively large, however, are shown to have a significant impact not just on the LCR sector but on others who rely on the same input base.
The results of the analysis show that LCRs could reverse the trend of greater economic integration which could threaten global growth. Studies have demonstrated the benefits of intermediate trade in promoting access to technology and increased productivity. Thus, in cutting off access to these inputs, LCRs actually undermine the primary objectives of industrial development and technology transfer.

Figure 2. Change in source location of inputs in all other sectors from a communications LCR

Local content requirements take a variety of forms

Trade-related LCRs have been applied in a number of forms beyond those focused on input markets. LCRs can also relate to discriminatory government procurement (GP) and localisation requirements associated with data protection and security, which have both been implemented by a number of governments since 2008.

Although the basic inefficiencies created by LCRs are as much present in discriminatory government procurement as any other form of LCR, the impact of these policies depends on a number of factors, including the degree of market power and the degree of foreign contestability in the sector. GP LCRs reduce the number of firms eligible to enter markets, which can increase market power and reduce output and employment, raising procurement costs and undermining 'value for money' objectives. The extent of the GP LCR impact depends on the market structure of the specific sector and the relative size of GP opportunities in that sector. To reduce the risk of discriminatory procurement, it would be beneficial if policymakers were to expand the number of countries party to the WTO Government Procurement Agreement and strengthen the commitments of existing signatories.

There has also been an increase in the use of LCRs in the form of data localisation requirements. In today's markets, data flows are an essential part of trade, and LCRs of this nature have implications for almost every sector of the economy. When overly restrictive, they affect firms' ability to adopt the most efficient technologies, influence investment and employment decisions, increase the cost of innovation and lead to missed business opportunities. Efforts to control data generally stem from policies that either require local storage and processing, or those that restrict the movement of personal data. The motivations behind these policies broadly fall under concerns for privacy, security and access; however, some may also be protectionist in nature. The policy challenge is therefore to strike a balance between legitimate concerns about privacy and proprietary information on the one hand, and open markets on the other.
Finding Alternative Policies to LCRs

Economy-wide, horizontal policies provide the best possible environment for the economy to expand along areas of comparative advantage, while allowing for development of new growth areas. These policies should be targeted at creating a good business and regulatory environment, reducing trade and investment barriers, and targeting innovation policy and infrastructure development. Improvements in these complementary policy areas will lead to trade outcomes that are more sustainable over the long-run. In some instances, more targeted policies, such as selected-skill development, could be considered.

More Information

» OECD Policy Paper on Local Content Requirements  
  http://oe.cd/lcr15

» OECD Trade and Agriculture Directorate  
  http://www.oecd.org/tad

» Sign-up for OECD Trade News Alerts  
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