

Excess capacity in the global steel industry: The current situation and ways forward

Excess capacity is one of the main challenges facing the global steel sector today. The growing gap between global steelmaking capacity and demand has led to a deterioration in the financial situation of steelmakers, and has raised concerns about the longer-term economic viability and efficiency of the industry. Although excess capacity in the global steel industry has increased significantly since the financial crisis, and despite slowing demand growth in global markets, there continues to be new investment projects in many parts of the world.

On the one hand, while the opening and closure of steel plants is usually based on the commercial decisions of private companies, government interventions that support the building of new capacity or keep inefficient facilities in operation can exacerbate the problem of global excess capacity and harm the business conditions of efficient steel producers in all markets. On the other hand, policies that promote the efficient restructuring of the industry or provide assistance to workers who may be displaced by the closure of uneconomic mills can be useful tools to address the problem and promote greater stability in global steel markets.

Following the Ministerial Council Meeting on 6-7 May 2014, where Ministers stressed the need to address the issue of excess capacity in some industries such as steel, the OECD Steel Committee has deepened its discussions on capacity, and will take this work further in the next few years.¹ In addition to monitoring capacity developments, the Committee plans on examining government policies and their effects on global excess capacity, with an aim to reach a common understanding about which policies: *i*) promote a better functioning of the market and more efficient global steel industry; and *ii*) contribute to excess steelmaking capacity by distorting trade and competition in domestic and global markets.

What is the extent of global excess capacity?

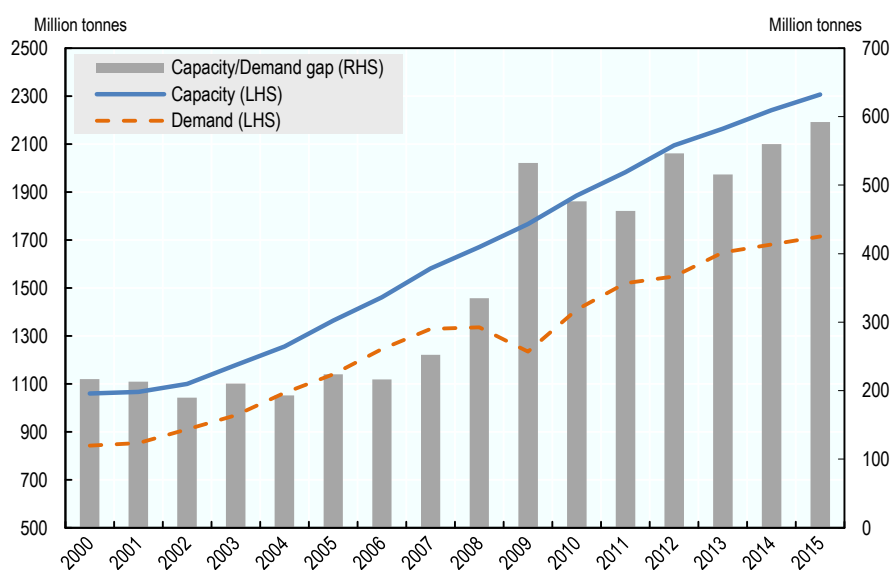
The global steel industry's capacity to produce steel has increased rapidly since the early 2000s. Most of the growth in steelmaking capacity has occurred in non-OECD economies, to support growing construction and manufacturing activity, as well as to help build the infrastructure necessary for the economic development of these emerging economies. The world's nominal steelmaking capacity is estimated to reach 2 241 million metric tonnes (mmt) in 2014, according to the OECD Secretariat, a level that is more than twice as high as the 1 060 mmt capacity level observed in 2000. With investment projects continuing to take place in many parts of the world, nominal global steelmaking capacity is expected to climb by a further 120 mmt in the period to 2017, bringing total worldwide capacity to 2 361 mmt by 2017.

-
1. An important item discussed at the OECD Ministerial Council Meeting (MCM), which was held in May 2014 and chaired by Japan, was about resilient economies and societies. The MCM Chair's Summary made specific reference to steel: "Ministers also discussed positive shifts in employment and production patterns, the future of manufacturing as well as entrepreneurship, including the role of young firms and SMEs, and stressed the need to address the issue of excess capacity in some global industries, such as steel, in relation to supporting measures."

Whether or not excess capacity arises is a function of whether demand has kept pace with this rapid growth in supply. Although the industry is emerging from a severe cyclical downturn that was triggered by the global economic and financial crisis of 2008-2009, the demand recovery has been uneven and sluggish in many economies. In 2013, crude steel demand stood at 1 648 mmt, or about 516 mmt below nominal capacity, representing one of the highest gaps in the history of the global steel industry. With investment projects continuing to increase in a number of economies while steel consumption growth is anticipated to remain moderate, the global imbalance will continue to pose risks for the industry for the foreseeable future, unless more concerted efforts are made by industry and governments to address the challenge.

However, it is important to note that measures of excess capacity cannot be imputed directly from the gap between nominal capacity and demand. Indeed, it is not efficient for the steel industry to run at full capacity, even when pricing is attractive and companies appear to be maximising their output. During the peak of the pre-crisis price upturn in the first half of 2008, for example, monthly global capacity utilisation did not rise above 91%.² Seasonal factors as well as the need to occasionally close down operations to refurbish steel plants and add new facilities tend to reduce the effective capacity of steel mills.

World crude steel capacity (nominal) and demand



Notes: The Secretariat assumes demand growth of 2% in 2014 and 2015. These are the most recent rates of growth forecast by the World Steel Association for world apparent steel use (October 2014 Short Range Outlook).

Sources: OECD for nominal capacity and the World Steel Association for demand.

2. Monthly capacity utilisation rates are according to World Steel Association data.

What are the reasons for global excess capacity?

The main factors that contribute to capacity imbalances in the steel industry include market downturns, but also a number of government interventions and other market-distorting practices. As noted above, for most steel mills, it is normal to have periods of under-utilised capacity. When demand and prices of steel fall, profit-maximising firms should reduce production and thus leave a certain amount of capacity idle. Profits will tend to be lower because the firms still have to pay for their fixed assets, including their under-utilised steelmaking furnaces and rolling facilities. If the situation persists over time, however, then firms operating under normal market conditions would try to minimise their fixed costs by scaling back on capacity, thus making excess capacity a short-run phenomenon. History has nevertheless demonstrated that the adjustment process can be long and arduous in the steel industry, with some regions experiencing extended periods of excess capacity.

On the one hand, this can be due to high exit barriers, namely the costs of closure that discourage rapid adjustments in capacity. For example, capacity closures entail high costs of dismantling the mills, potential clean-up and other environmental costs, and labour-related costs. In the face of market uncertainty firms may choose to delay exit rather than incur such costs. Expectations about future market conditions may also be contributing to current excess capacity; for example, steelmakers in some countries are investing heavily today in new steel production facilities in anticipation of much higher demand several years from now.

On the other hand, excess capacity that persists over time can also be indicative of government actions that hinder adjustments that would normally occur in competitive markets. Due to the importance and strategic nature of the steel industry to many national economies, a tendency during market downturns is to preserve the capacity of the industry, in order to alleviate unemployment and other social problems that would otherwise occur due to capacity closures. In addition, in some large net steel-importing regions, governments are also interested in moving towards greater “self-sufficiency” in steel production in order to reduce their dependency on imports. Research by the Secretariat shows that, despite current market conditions, a large number of new projects are taking place, which will increase global crude steelmaking capacity significantly in the coming years.

In the current context, recent discussions at the OECD Steel Committee have suggested that in some regions excess capacity reflects temporary factors related to the business cycle while in other cases it reflects structural factors connected to government interventions. Specific concerns related to government steel policies include continued government subsidies (notably subsidies for the creation of new capacity or the maintenance of inefficient capacities) and continued approvals for new steel facilities. Governments have also noted that trade related measures, constraints on foreign investment, and the activities of government financial agencies are also contributing to global excess capacity and creating difficulties for the industry in addition to weak market conditions. And finally, policy measures which discourage “optimal” exit of the least productive plants may also contribute to excess capacity.

What are the impacts of excess capacity?

Excessive levels of steelmaking capacity have important implications for the steel industry, often associated with over-supply, low prices, weak profitability, bankruptcies and localised job losses. Recent work conducted by the OECD has examined the financial health of the steel industry and established a link between excess capacity and profitability. It has shown that the financial performance of the industry is perhaps worse now than it was during the global steel crisis of the late 1990s, in large part due to the significant excess capacity that exists today.

Given the global nature of the industry, excess capacity in one region can displace production in other regions, thus harming producers in those markets and creating risks for trade actions and government interventions to protect domestic industries. It can also lead to wasteful energy use and thus have negative environmental impacts.

Increased trade frictions are already visible amongst trading partners today. Subsidies and government support measures that promote investment in steelmaking facilities or sustain companies in distress that would otherwise shut down are a major source of this trade friction. Subsidies that encourage steelmakers to keep production running at high levels, even under weak market conditions, have had significant effects on trade, with unfair trade practices such as dumping having resulted in injury to the industries of other economies.

What should be done?

In competitive economies, it is the responsibility of the steel companies themselves to identify ways to adapt to changing market conditions. That is, businesses are best placed to decide on when to invest in new capacity or when to scale it back when market conditions change. The role of governments should be to allow market mechanisms to work properly and avoid measures that artificially support steelmaking capacity.

A key priority, therefore, is to identify appropriate policy approaches to address excess capacity. In this context, of particular importance for governments will be to work towards removing market distorting policies such as subsidies that promote the emergence of new capacity or delay the closure of failing companies, eliminating trade and investment barriers that slow needed restructuring of the industry, allowing market-based investment decisions in the steel sector, and ensuring that new plants are subject to standards that protect the environment and uphold worker safety.

The OECD Steel Committee has continued to deepen its discussions on capacity, and plans to take this work further in its programme of work and budget for 2015-2016. For example, the PWB calls for work that analyses government policies and their implications for global excess capacity developments, as well as maintaining a database of ongoing investment projects, including the sources of finance for the steel projects and any government support measures provided. At a later stage, the Committee may consider organising a high-level meeting to facilitate discussion on excess capacity issues at a higher political level. A key aim of this work will be to establish common perspectives on ways to avoid practices that create harmful trade and competitive distortions, and which can lead to a long-lasting positive impact on the effective functioning of the global steel market.