MARKET INTELLIGENCE

Contact: Ed Sullivan, SVP & Chief Economist, (847) 972-9006, esullivan@cement.org

April 2018

Tariffs Impact on Cement Consumption

Overview

The economy is strong and its existing momentum will not dissipate quickly. There is no longer the possibility of avoiding a trade war – we are in one. The question is, how severe will the dispute become?

While the political rhetoric hinted at the possibility of trade war, PCA largely discounted these possibilities because we believed policy makers would recognize the potential significant adverse reaction it could have on the economy. As a result, we believed they would stay clear of such policies. The announcement of Trump's intention to levy tariffs on steel and aluminum imports occurred just days before PCA's scheduled release of the spring forecast. As a result, the prospects of even a limited trade war was not incorporated into the forecast. This report presents potential downside risks to the recently released forecast.

From our perspective, the levying of tariffs could result in a bevy of economic scenarios – each offering differing adversities for the near-term health of the economy. To simplify and better generalize the risks, PCA identifies three distinct scenarios and recognizes that shades exist between the scenarios. The scenarios include: 1) No Significant Retaliation; 2) Limited Retaliation; and 3) Global Trade War.

No Significant Retaliation: In this scenario, relatively minor posturing is taken by the United States and its key trading partners. Minor reactive tariffs are levied against United States' exports. Words become harsh. For the most part, posturing takes center stage. For all the bluster, no significant heightening of tariffs materializes.

No Significant Retaliation

• GDP Growth:	- 0.1%
• Job Loss:	-190K
• Construction Spending:	- 0.2%
• Cement Consumption (GDP)	-204K MT
• Cement Consumption (RP)	+140K MT
• Net	- 64K MT

Under this scenario, the tariffs have a relatively benign adverse impact on United States' economic growth. Inflation rises slightly, reducing U.S. consumption and adds upward pressure on interest rates. U.S. exports are reduced. Overall economic growth is reduced slightly with real GDP growth slowing by 10 basis points, compared to the spring forecast.

In general, 6% of economic activity is construction spending. With the slight slowing in economic growth, growth in construction spending will also moderate slightly. In this scenario, growth in construction spending slows 0.2% compared to the baseline forecast – or roughly $2.2 billion lower. Applying a national cement intensity to the change in construction spending activity yields an estimate regarding the change in cement consumption of roughly a 204,000 metric ton decline compared to the baseline spring forecast estimates.

While the softer economic activity will impair cement consumption growth, the 25% tariff levied against steel imports could lead to modest market share gains for concrete versus steel. Some absorption of the tariff costs will undoubtedly occur and will not fully materialize as a 25% increase in imported steel. Furthermore, not all the suppliers of imported steel are subject to the tariff. Finally, many buildings that will be constructed during 2018 have already been material specified. Given all these factors and accounting for time lags, nearly 140,000 metric tons of cement consumption may be added due to concrete's improved competitive advantage.

According to this scenario, softer economic conditions more than offset potential market share gains and leads to a modest 64,000 metric ton reduction compared to the baseline estimates. According to this scenario, 2018 and 2019 growth rates are marginally reduced by 10 basis points.

Limited Retaliation: In this scenario, under the banner of "fair and free trade", more than posturing occurs. Significant retaliation materializes and includes the United States' major trading partners. While this may include NAFTA (Mexico and Canada), it is likely to focus on countries viewed as trading cheats, such as China. Trade cheats are those governments that engage in at least one of the following activities:

- Implements non-tariff barriers on imports from the United States,
- Grants subsidies, or tax benefits, to export oriented industries, and/or
- Engages in currency manipulation.

According to this definition of trade cheaters, the spectrum of products and countries that could be targeted by tariffs widens significantly. The back-and-forth consideration of negotiating egos versus near-term adverse economic impacts leads to expanded tariffs. The expansion of tariffs is restrained and falls well short of a full-fledged global trade war.

Under this scenario, the tariffs have a significant adverse impact on United States' economic growth. Inflation rises, interest rates increase, U.S. consumption growth is compromised. U.S. exports are significantly reduced. Economic uncertainty increases and some investment projects are postponed. Overall economic growth is reduced by nearly a full point (90 basis points).

Job creation slows to 500,000 net new jobs, compared to over two million in the spring baseline forecast. State and local fiscal conditions deteriorate. Local public construction retreats. Nonresidential construction spending turns negative. With slower job creation, household formation slows and rising mortgage interest rates put an additional hurdle in the way of residential construction activity. Residential growth flattens, or perhaps records only a modest gain.

Growth in overall construction struggles to record a gain and hovers within 50 basis points on either side of zero growth. Cement consumption, according to this scenario, declines by 2.7 million metric tons compared to the spring baseline forecast – leaving only modest gains in cement consumption growth.

Limited Retaliation

- GDP Growth: - 0.9%
- Job Loss: -1.8 M

- Construction Spending: - 2.5%
- Cement Consumption (GDP) -2.7 MMT
- Cement Consumption (RP) +130K MT
- Net - 2.6 MMT

As in the first scenario, higher steel prices offer the potential for market share gains. These gains, however, are applied to a smaller net addition to cement consumption and yield smaller cement consumption positives.

According to this scenario, harsh economic conditions impact on cement consumption vastly outweigh the potential for gains associated with market share gains. In net, cement consumption is 2.6 million metric tons lower in this scenario compared against the spring baseline forecast.

Global Trade War

- GDP Growth: - 2.1%
- Job Loss: -4.0 M

- Construction Spending: - 10.5%
- Cement Consumption (GDP) -10.8 MMT
- Cement Consumption (RP) +100K MT
- Net - 10.8 MMT

Global Trade War: In this scenario, one tariff levied is matched by a correspondingly harsh response. Political ego replaces common sense. Global trade shrinks. World GDP growth recedes and eventually turns negative. Inflation runs strong. Monetary policy, in reaction to rising inflation, tightens.

While exports are a relatively small portion of United States' economic activity, rising inflation, higher interest rates, and increased uncertainty curtail consumer and business spending. Residential housing construction activity turns negative. With the depletion of vitality in consumer and investment spending, job creation evaporates and nonresidential construction declines. State and local fiscal conditions, which are already challenged, turn decidedly worse reinforcing the decline in other areas of construction.

Similar adverse economic consequences occur among trading partners. A full blown global and United States recession ensues. Fiscal policy actions that include tax reform and infrastructure spending add to an already massive federal debt. The $20 trillion debt, in the context of a recession, may lead to a reduction in United States' debt rating – resulting in even higher interest rates and potentially magnifying the intensity of the downturn. In a downturn such as this, the fiscal chickens come home to roost and amplify the economic adversity.

According to this scenario, extremely harsh economic conditions result in a recession, or near recession in the United States. Because of higher interest rates, the retreat in job creation, and the adverse implications for state fiscal conditions, the downturn weighs heavily on construction. In net, cement consumption declines by nearly 11 million metric tons compared against the spring baseline forecast. Under such a scenario, we could be light on the magnitude of the downturn.

Risk Assessment

If nothing else, it is clear that the possibility of a trade war can turn a strong economy very dark, very quickly. At this point, it is difficult to separate political bluster from actual intentions. Even though there has been some ratcheting up of hyperbole and tariffs between the United States and China, it seems that right now the economy stands at the cusp between "No Significant Retaliation" and "Limited Retaliation". At this point, the downside risks to PCA's spring forecast is rather small. That assessment could change quickly – for no good economic reason.