

Country Code	ISO	WFO Subject Code	Country Subject Description	Subject Notes	Units	Scale
1992	AFG	AFG	Afghanistan			
1992	AGO	AGO	Angola			
1992	ALB	ALB	Albania			
1992	AND	AND	Andorra			
1992	ARE	ARE	United Arab Emirates			
1992	ARG	ARG	Argentina			
1992	ARM	ARM	Armenia			
1992	AUS	AUS	Australia			
1992	AUT	AUT	Austria			
1992	BEL	BEL	Belgium			
1992	BEN	BEN	Benin			
1992	BGR	BGR	Bulgaria			
1992	BHR	BHR	Bahrain			
1992	BHS	BHS	Bahamas			
1992	BOL	BOL	Bolivia			
1992	BRA	BRA	Brazil			
1992	BRE	BRE	Brexit			
1992	BUL	BUL	Bulgaria			
1992	BUR	BUR	Burkina Faso			
1992	BUR	BUR	Burundi			
1992	CAF	CAF	Cote d'Ivoire			
1992	CAN	CAN	Canada			
1992	CEB	CEB	Cebu			
1992	CHE	CHE	Switzerland			
1992	CHN	CHN	China			
1992	CIL	CIL	Cyprus			
1992	CMR	CMR	Cameroon			
1992	COM	COM	Comoros			
1992	CPV	CPV	Cape Verde			
1992	CRI	CRI	Costa Rica			
1992	CRO	CRO	Croatia			
1992	CUB	CUB	Cuba			
1992	CYR	CYR	Cyprus			
1992	CZE	CZE	Czechia			
1992	DEU	DEU	Germany			
1992	DJI	DJI	Djibouti			
1992	DNK	DNK	Denmark			
1992	DOM	DOM	Dominican Republic			
1992	DZA	DZA	Algeria			
1992	ECU	ECU	Ecuador			
1992	EGY	EGY	Egypt			
1992	ERI	ERI	Eritrea			
1992	ESP	ESP	Spain			
1992	EST	EST	Estonia			
1992	ETH	ETH	Ethiopia			
1992	FIN	FIN	Finland			
1992	FRA	FRA	France			
1992	GAB	GAB	Gabon			
1992	GAM	GAM	Gambia			
1992	GEO	GEO	Georgia			
1992	GER	GER	Germany			
1992	GHA	GHA	Ghana			
1992	GRC	GRC	Greece			
1992	GRD	GRD	Greece			
1992	GTM	GTM	Guatemala			
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Inventories and Cycles. We have clearly bumped into a surprisingly broad-based global inventory cycle. It is the only explanation for a nearly simultaneous jolt to world manufacturing and trade in January- February with little counterpart in services production or consumer spending. Many have taken the jolt as an omen of general recession, but that is hardly necessary. In particular, the absence of a credit crunch makes a general downturn unlikely.

For various reasons, which I will get into below, I believe the inventory adjustment will be reflected in US statistics with a delay. That is too bad, because US inventory data is some of the best and most detailed in the global system and this delay will be confusing for analysts and investors. Below I report nominal US inventories, ex-oil and farm product, that excludes items with unusually large price moves. (See Chart left, below.)

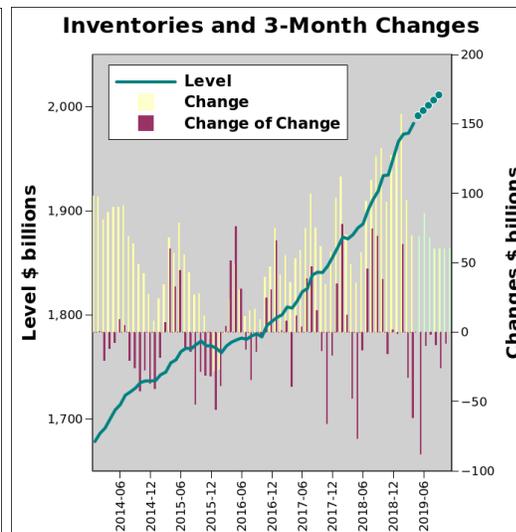
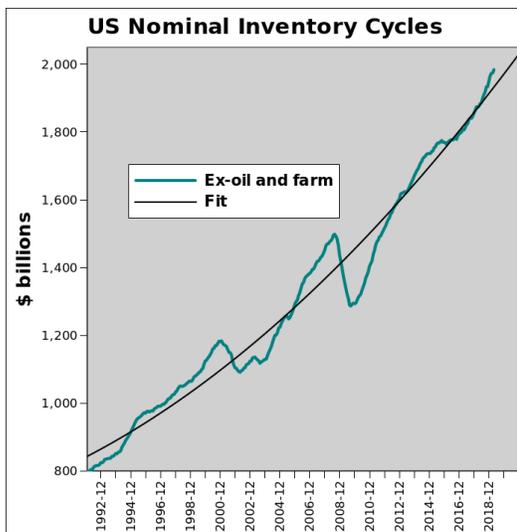
An important feature of the slow global recovery from the Great Recession has been a series of mild US, and global, inventory undulations ever since. Possibly reacting to the nightmarish excess of 2008, and possibly finding it difficult to manage very long global supply chains, manufacturers and importers have been through a series of inventory mini-cycles since the Great Recession. These may seem more important than ever before given the low trend growth now prevailing. To give a

sense of proportion, I show a non-linear fit to the trend of accumulation in nominal US inventories. Through 1Q, US inventories have moved slightly higher, putting us in a position for a period of slower inventory build ahead, but not necessarily a full recession.

Inventories correspond to the accumulation of all the varied intermediate products of a modern economy. Specialization and trend growth means all these partial products are normally accumulated steadily. Only the change of changes in inventories impact GDP.

When US inventories got ahead of themselves in 2014, calling for slower builds through 2015-2016, the negative impact was felt in a choppy series of negative impacts on GDP. When manufacturers and importers got their confidence back, the return to normal inventory build boosted growth, again in a choppy fashion, during 2017-18. But, by early 2019 inventory building was so fast that a correction is highly likely sometime around mid-2019. (See Chart right, below, which shows inventory levels, changes, and changes of changes.)

Unstable financial markets may find these shifts alarming since they seem to suggest deeper underlying trends. They should not. Inventory adjustments alone, without other cyclical shocks, are never likely to cause a business cycle turning point alone.



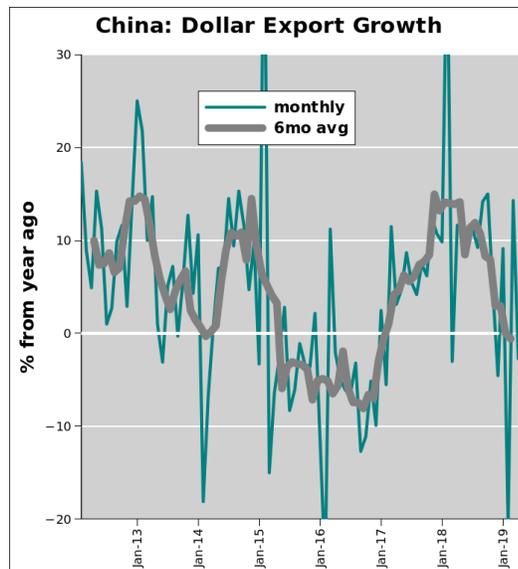
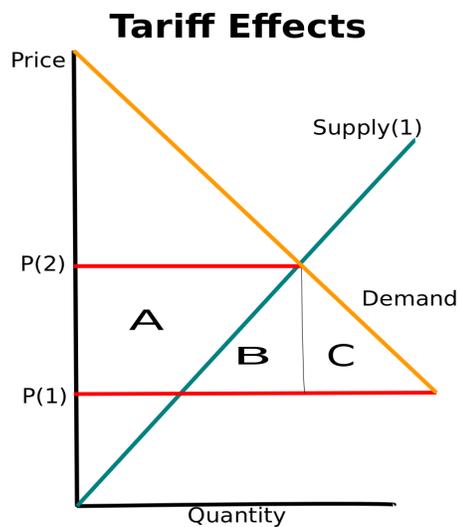
Exploiting Tariff Risks. Mr. Trump's continuous threats to impose ever-higher tariffs on Chinese imports have clearly amplified the US and world inventory cycle. We have abundant evidence that speculative importers have accumulated goods on US shores in advance of the long-heralded tariffs. Either the extra goods can be sold at the same price if tariffs are lifted, or higher prices if the tariffs remain. It was a one way bet for importers, whatever the merits of the policy.

But why were these tariffs been proposed in the first place? If tradable (imported) goods are supplied by domestic companies along green Supply(1), but demand (in orange) is greater than domestic supply because foreign goods are cheaper as supplied at P(1), then a substantial import flow develops. Applying a tariff, can result in a situation at P(2) where the price is high enough to attract fresh domestic supply and encourage a cut in home demand.¹ (See Chart left, below.)

Consumers will be forced to give up goods they could have afforded. Producers will expand production that is more expensive than necessary. These efficiency losses are areas B+C. At the same time,

a big part of the extra price of goods sold is a pure tax transfer from consumers to home producers, area A. Of course, this windfall transfer is why back-room deals with domestic producers are so common in banana republics, in fact almost defines them. Notice there is no public sector tax revenue left in this particular case, when everything settles down.

Whatever the eventual self-inflicted damage of these tariffs, which may be significant, their pre-announcement has clearly motivated importers. A surge in Chinese exports during 2018 has already happened, an important part of which has doubtless contributed to the surge in US inventories we have seen. Whatever the quarterly noise in reporting, the US import inventory build-up certainly gave a boost to Chinese GDP during 2018. Once the tariffs are imposed or, even if they are ditched, any further build-up of speculative inventories will no longer look so profitable, so inventories will be run down. The biggest, delayed, damage must fall on Chinese production, relatively little need fall on US production. (See Chart right, below.)



¹This is the case of a small country applying a tariff in a big world. For the US the case is different, at least somewhat, but not completely.

Reverberating Inventories. In the US, output measures snapped back unconvincingly after the global flash-crash of Jan-Feb, and some have begun to dip again. One bright spot, a one-month surge in consumer spending, may be partly due to consumers seeking to buy imported consumer durables before tariffs are imposed. Otherwise, car sales continue to edge down, and home sales are only reluctantly recovering with lower mortgage rates. Most importantly, an investment upturn, supposedly bought with the huge tax cut for business and rich consumers is not materializing. Instead, business chiefs are understandably reluctant to commit to future full of politically motivated shocks to oil and manufactured goods prices.

After feeling the global manufacturing hiccup and flash-crash early, the European economy seems to have stabilized. Orders received by Taiwan and Japan all point to a stabilization of activity in Europe, as do local surveys. Like elsewhere, the global shock was felt mainly in industrial production and hardly at all in construction and services. Unemployment generally has room to fall further, so job gains and higher incomes are more likely than in the US. Consumer spending should hold up and a big adjustment in car sales seems to be coming to an end. Within this general picture, Italian and UK

conditions are much weaker as the politics of separation from Europe play out in different ways, all of which may imply radically new business environments.

After brief evidence of recovery, China's activity has turned down sharply. A sudden and brief rebound in March has faded steadily, as unusually weak industrial production, electricity use, and rebar and steel prices emerge. Car sales remain depressed. In response, construction, including apartment buildings, has been unleashed to meet pent-up demand provoking a sustained upswing in prices. And steel production has hit a peak that we all hope is not going into an inventory overhang that can dog the economy for months to come. It looks like an emergency, and plans to roll back leverage are going to have to go on hold as credit surges through bank directed lending and a big new issuance of government and local guaranteed bonds.

Uncertain about what triggered the flash crash in global activity early in the year, and what might be driving any fresh slowdown, central bankers have reacted in words. Their most important message is that whatever they did in 2008-9 they can do again, so there should be no reason for self-reinforcing panic by investors and business planners.

Markets are responding, perhaps over-responding to an amplified inventory disturbance created by US tariff pre-announcements. Messing with global economic pricing in the service of a running virtual reality show is also deeply disruptive to any rational investment planning.

Mr Trump's excursions into sanctions on Iran and tariffs on China can have unexpectedly inflationary effects. If Iran retaliates by cutting off the Straights of Hormuz, oil prices can go very high in the short run. If tariffs on Chinese imports are retained and expanded, an important share of US manufactured goods prices could jump by 20-30%. So we could get a pause in global growth, amid large and confusing inventory signals, with no fall in inflation, possibly the worst possible case for bond and equity valuations.

Finally, I reject the popular but tiresome idea that central banks are hostages to supporting asset valuations. We are not threatened by a financial system collapse and great depression as we were in 2008-9. Instead, we could well be in a world with low and sticky inflation at greatest risk of gross overkill with the policies of financial ease now priced into markets.