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Wars, oil, and global growth

- **The global economy is absorbing three shocks: US trade war, Saudi oil supply boost, and Mideast war**
- **We apply an equilibrium model to assess the impact of the three shocks on prices and global GDP**
- **Trade war to damp global GDP by 0.7%, concentrated in 2H25**
- **Rising Saudi supply is expected to boost GDP by 0.4% cushioning the blow from trade…**
- **…but Mideast war could fully remove this cushion, boosting global CPI by 2%-pt(ar) next**
- **On our model, loss of all Iranian exports (1.8mbd) boosts Brent to $100/bbl...**
- **...and damps global GDP by 2%-pt(ar) in 2H25—threatening recession**

Our forecast envisions a downshift to sub-par global growth in 2H25 as the front-loading ahead of tariffs begins to unwind, and as purchasing power is squeezed by the implementation and passthrough of tariffs into US prices. If we are right, there is sufficient underlying resilience to absorb this shock, allowing the global expansion to bend to a soft 1.4%ar pace of growth in 2H25. The fall in global oil prices over the past two months—which our commodity analysts attribute to a Saudi boost to supply—reinforces this forecast for resiliency. However, the outbreak of a Middle East war is shifting oil market dynamics as rising geopolitical risk premia push crude oil prices 15% higher.

We apply a model-based approach to scale the impact of these shocks on global GDP. We begin with the trade war, which is estimated to damp global GDP by 0.6%. We then filter this estimate through our global GDP-oil equilibrium model. This provides a framework to estimate the trade war's impact on oil prices as well as a gauge of both price and growth impacts of this year's conflicting oil supply shocks. The analysis is limited as it doesn't capture the impact of sentiment effects, which are biased to magnifying the negative consequences of both the trade war and the recent Mideast War. Despite its shortcomings, the analysis generates useful insights:

- **A helping hand from the Saudis:** The Saudi oil supply boost earlier this year is estimated to offset roughly half of the drag owing to the direct effects of the trade war.
- **A large fundamental drop in oil prices.** The trade war and extra oil supply complement each other in that they both put considerable downward pressure on oil prices. According to our model, these two shocks point to crude oil prices close to $50/bbl—close to the JPMorgan Commodity team's target price target for early next year.
- **Mideast war premium fully undoes supply shock.** The rise in risk premia associated with the Mideast war, if sustained, is already sufficient to fully offset the cushion provided by the oil supply increase. This leaves a net drag on global GDP growth of 0.6% this year. Concentrated in the second half, this drag should lower 2H25 global GDP growth by more than 1% at an annualized pace.
- **Mideast war risks skewed upward on price.** A full curtailment of Iranian oil exports (1.8mbd) would, according to our model, lift oil prices to near $100/bbl and, if sustained, reduce global GDP by a full %-point (or, more likely, 2%-point annualized in 2H25), threatening a global recession. This would likely be tempered by a Saudi supply and US SPR offset but magnified by rising risk premia across asset classes.
- **So far, model well aligned with the forecast.** Our forecast revisions to the J.P. Morgan outlook align well with the estimated impacts of these three shocks assuming Brent remains near $75/bbl. Since the US election, we have revised down 2025 global GDP growth by 0.6%-point, with all of this revision coming in the second half of the year.

A shocking first half

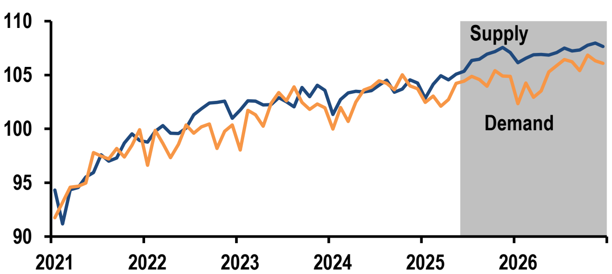
The US and global economies are set to absorb multiple shocks this year. Specifically, we identify three independent political/policy shifts:

- **A trade war that depresses demand …** In a recent note, we estimate that the direct effect of the current US tariffs on the rest of the world will damp global GDP growth by 0.6%-point (Figure 1). Anticipating that this drag is concentrated in 2H25, overall global growth would slip by more than a 1%ar. This figure does not incorporate pending sector tariffs or potential amplifying impacts through sentiment. The resulting weaker path of growth will also weigh on the price of oil.
- **…is cushioned by an OPEC boost to oil supply…** An unexpected offset to the trade war came with the OPEC

producing nations (Saudia Arabia in particular) agreeing to over-supply the market to reduce prices. While this move may hurt US oil production, it provides a lifeline to energy consumers across the globe. Our commodities team has boosted its full-year oil supply forecast by 0.6mbd from our year-ahead outlook, mostly back-loaded to 2H25 (Figure 2). News of this boost to oil supplies has weighed on Brent crude prices in 2Q, proving a welcome boost to consumer purchasing power.

Figure 2: Global oil supply and demand

mbd

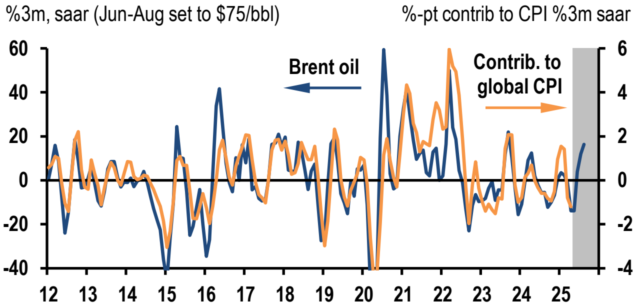


Source: IEA, J.P. Morgan

- **…that is threatened by a real war.** The start of war between Israel and Iran has heightened concerns in the energy market. The threat of disruption to the flow of oil has led a spike in crude prices. So far, energy infrastructure has been spared and we think this will continue to be the case. However, until the risk premium subsides, the impact will pass through to purchasing power. Should the current $75/bbl price of Brent be maintained, the contribution to the change in global consumer prices could be as much as 2%-points annualized over the coming three months (Figure 3).

Figure 3: Oil and global CPI energy price contribution

%3m, saar (Jun-Aug set to $75/bbl) %-pt contrib to CPI %3m saar



Source: J.P. Morgan Global Economics

A useful equilibrium model

To assess the impact of the demand and supply shocks identified above, we have developed a simple equilibrium model. This model addresses the identification problem directly, embedding empirical estimates of the relationships between activity, supply, and demand in the developed and emerging markets. While simple, this model aligns well with more sophisticated commodity-impact models used by the IMF. Solving for the model equilibrium provides a useful set of "elasticities" showing the impact of demand and supply shocks on both GDP growth and oil prices (Table 1). For more details and the precise specification of the demand and supply curves, see the appendix.

Table 1: Elasticities in the global GDP and oil markets

%-pt impact on growth in real GDP and oil prices for given shock

	Shocks				
	Demand (GDP, +1%-pt)			Supply (Oil)	
	Global*	DM	EM	Price (+10%)	Mbd (-1)
Ex-post impact on:					
Oil price	+24.9	+14.0	+11.0	+6.8	+25.2
Global GDP	+1.23	+0.87	+0.36	-0.16	-0.60
DM	+0.95	+0.93	+0.02	-0.14	-0.52
EM	+1.70	+0.78	+0.91	-0.20	-0.72

Source: J.P. Morgan (see appendix); * Global shock assumes 1% shock to both DM and EM.

A 1% demand shock on global GDP (with both the DM and EM seeing 1% stronger activity) boosts the price of oil by 25%. Notably, despite the much higher level of prices, the spillover of strength in the DM to the EM dominates, and this ends up leading to an even stronger pace of growth. From a global perspective, it showcases a high degree of elasticity in the oil supply market. By contrast, a 10% jump in the price of oil from a supply shock ends up damping global growth by 0.16%. If this is adjusted to over two quarters, the impact is about 0.3% annualized slower global GDP growth. Post the adjustment, the price of oil ends up being only 6.8% higher owing to the elasticity of global demand (i.e. demand destruction). A similar exercise can be done for a 1mbd decrease in the supply of oil, which we estimate to initially boost the price of oil by 37%, but only by 25% after the growth adjustment of -0.6% off of global GDP.

On net: Gauging the impact of the shocks

Our equilibrium model is applied to the three shocks outlined above. The results are reported in Table 2. On balance, we conclude that the trade war shock of 0.6% of global GDP this year is tempered by 0.4% from the positive OPEC supply shock. This rounds to a net drag on global GDP of 0.3%. If we believe the impact of these shocks have yet to be felt and will show up in 2H25, the impact would be to reduce global GDP growth by 0.6% annualized over the coming two quarters.

In terms of the price of oil, both shocks work in the same direction. According to our model, the trade war shock should be depressing the price of oil by 10% while the positive OPEC supply shock should be reducing the price further by 15%. Combined and relative to the 4Q24 price of $73/bbl, this 25% drop points to a price of $55/bbl for Brent crude. This is quite a bit below our forecast of $62/bbl for 2H25 but

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identical to our $55/bbl price target for 1Q26. The more bearish model-estimate for the price of oil in 2H25 could reflect the market's more optimistic view on growth in the coming quarters or potentially a lower supply forecast—for example, the IEA's estimate of supply this year is roughly 1mbd lower than the J.P. Morgan outlook.

Table 2: Model impact of oil on the global economy, 2025
All figures are model based and not actual forecasts

	Trade war (1)	OPEC supply (2)	Net (1)+(2)	Mideast War (3)	Net (1)+(2)+(3)
			Shocks		
Global GDP (%)	-0.4	--	-0.4	--	-0.9
Developed	-0.6	--	-0.6	--	-1.3
Emerging	-0.1	--	0.0	--	-0.1
Oil (mbd)	--	+0.6	+0.6	-0.6	+0.6
			Revision		
Global GDP (%)	-0.6	0.4	-0.3	-0.4	-0.6
Developed	-0.6	0.3	-0.3	-0.3	-0.6
Emerging	-0.6	0.4	-0.2	-0.4	-0.6
Oil prices					
%Change	-10	-15	-25	+15	-10
$/bbl	66	62	55	75	66

Source: J.P. Morgan; Demand shock is the estimated impact of the US trade war on GDP (ex-post revision, 0.6%). OPEC supply shock (2) comes from the +0.6mbd revision to 2025 global oil supply from our year-ahead outlook. Mideast War shock (3) comes from either a 0.6mbd reduction in supply from the Israel/Iran conflict or a 33% probability fo a complete stoppage of the 1.8mbd exported from Iran. Price %chg is applied to the Dec 2024 price ($73/bbl) for shocks (1) and (2) and from June 6 price ($66/bbl) for shock (3).

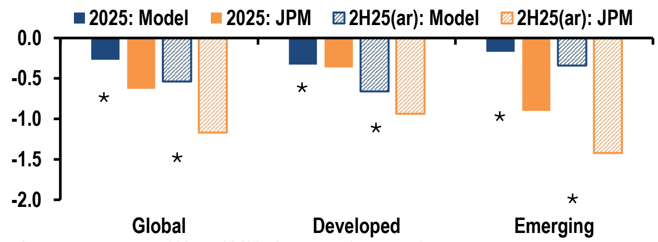
The Mideast war adds a new shock to our analysis. For now the price of oil is up roughly 15% since early June to about $75/bbl. Based on our model, this move implies a 0.6mbd cut to the supply of oil. Compared to the 1.8mbd exported from Iran, this would imply markets are pricing a 33% probability that all Iranian oil is stopped (an estimate similar to that of our commodities team). So far, there has been little disruption to the energy infrastructure in the region. However, as long as this risk premium is embedded in the price, the hit to purchasing power will be felt—adding as much as 2%-point annualized to headline consumer price inflation over the coming three months (Figure 3 above).

Our model suggests that a 0.6mbd loss of supply damps global GDP by 0.4%. If adjusted over the coming two quarters, it would weigh on global GDP growth by 0.8%-point annualized. On net, our calibration suggests that the new Mideast war shock exactly offsets the cushion that was coming from the extra OPEC supply announced earlier this year. This would leave only the trade war drag of 0.6% in place.

There are considerable risks around these estimates. The Mideast war is particularly fluid. On the positive side, any loss of Iranian supply would likely be offset by increased Saudi production and draws on the US Strategic Petroleum Reserve. However, with the war intensifying, the threat is considerable. According to our model, a full stop to Iranian exports (1.8mbd) boosts the price of oil 45% to near $100/bbl. Much will depend on the duration of the shocks and the impact of sentiment and risk premia across asset prices, however.

Figure 4: GDP revisions since October 2024

%pt; Model trade war, oil supply shocks only (Asterisks include Israel/Iran shock)



Source: J.P. Morgan; 2025 is 4Q/4Q. See Table 1 and text for explanation.

The model implied impact of the shocks considered in this note align reasonably well with the actual revisions made to our outlook. Looking at the 2025 outlook (4Q/4Q), the J.P. Morgan outlook has been marked down 0.6% since just before the US election in November 2024. This is just a bit larger than the 0.4% implied by the trade war and OPEC supply shocks (Figure 4). The new Mideast war shock adds a touch of downside risk. The downside risk is somewhat larger if we assume all the shocks impact the annualized pace of growth in 2H25.

Appendix: A simple equilibrium model

Our model was developed in "Modeling linkages between oil and the global economy" (*GDW*, February 17, 2012). For the exercise reported here, we increase the elasticity of DM GDP growth to EM GDP growth to 0.2 (from 0.1) to better capture the increased sensitivity of global financial markets to the EM as well as recognition of the EM's increasing size in the global economy. We also change the benchmark growth from potential (1.5% for the DM and 3.6% for the EM). The estimated impact of oil supply shocks on GDP growth traces out the demand curve for oil. This is written in terms of GDP growth (as a proxy for oil demand growth) and growth in the price of oil. For expositional purposes, real GDP growth is on the left-hand side of the equation:

DM and EM demand curves for oil

DM real GDP growth = 1.5+0.2(EM real GDP growth -4.2)-0.015*(Oil price growth)+DM demand shock*

EM real GDP growth = 3.6+0.9(DM real GDP growth -1.4)-0.010*(Oil price growth)+EM demand shock*

In addition to the impact of changes in the price of oil on real GDP growth—separated by region—the demand relationships allow for demand shocks that shift the demand curve either up or down relative to oil price changes. The relationships also allow for an interaction between DM and EM GDP growth. We allow for EM growth to respond more strongly to moves in DM GDP growth. A demand shock to DM GDP

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growth impacts EM GDP growth nearly one-for-one. By contrast, the impact of demand shocks to EM GDP growth on DM GDP growth is much smaller, as indicated by the estimated coefficients in the demand equations (the feedback between DM and EM growth ramps up the initial size of the coefficients). Based on these demand curves, if the price of oil is flat and there are no demand or supply shocks, real GDP grows in line with potential.

The estimated impact of GDP growth on the price of oil traces out the supply curve for oil. As with the demand curve, the supply curve is written in terms of real GDP growth and growth in the price of oil. For expositional purposes, oil price growth is on the left-hand side of the equation:

Global supply curve for oil

Oil price growth = -37(mbd supply shock)+6*(DM real GDP growth-1.5)+12*(EM real GDP growth-3.6)+Oil Supply Shock*

In addition to the impact of both DM and EM real GDP growth on the price of oil, the supply relationship also allows for a supply shock (in terms of millions of barrels per day additional supply). Empirically, a 1mbd rise/decline in the supply of oil reduces/increases the price of oil by 37%, all else equal. If both the DM and EM are growing at trend and there are no supply shocks, then the price of oil is constant. Implicitly, this assumes that the oil producers are increasing the supply of oil by just enough to keep up with demand growth, thus keeping prices unchanged.

The model (1) distinguishes between supply and demand forces and (2) provides empirical estimates of the net impact on GDP growth and oil prices from differences across consumers and suppliers of oil. However, the model abstracts from issues surrounding (3) timing and (4) the endogenous response of supply shocks to global demand and potential nonlinearities. A more detailed model would be needed to address these issues.

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