



PRIME THE PUMP: The Case For Repealing America's Oil Export Ban

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INTRODUCTION

The world looked very different 40 years ago when Congress forged the Energy Policy and Conservation Act (EPCA) that would be signed into law one year later, in December 1975, by President Ford. The Act was a matter of national urgency after the 1973 Arab oil embargo created domestic shortages, politically toxic lines at gasoline stations, and, practically overnight, pushed crude prices up some 400 percent.¹

Motivations for the Act's sweeping provisions to conserve and control energy markets were also fueled by the fact that, after nearly a century of unbridled growth in output from American oil fields, the half dozen years prior to 1975 saw, for the first time, a reversal and precipitous decline in U.S. crude production. At the same time, domestic oil consumption continued its rise, leading to soaring imports—with the economic and geopolitical implications obvious to all. Given such conditions, it was understandable that the EPCA would also implement a ban on crude exports by American firms, driven, as it was, by concerns over import dependency and shortages.²

Now, nearly a half-century later, conditions have changed dramatically. The United States has emerged as the world's fastest growing oil-producing nation, with the country's import dependency disappearing no less fast. What caused this permanent, secular shift in oil markets? New technologies deployed by thousands of small and mid-sized businesses. Yet current American oil policy—a misguided mix of thinly veiled industrial planning and state control over a major segment of the U.S. economy—remains locked in historical time warp.

Encouragingly, the first hint of political recognition of America's new energy realities came this June when the *Wall Street Journal* reported that a "U.S. Ruling Loosens Four-Decade Ban On Oil Exports."³

Nevertheless, the headline is misleading: the provisions of the EPCA that prohibit American companies from exercising the right to sell crude oil overseas have not changed. Instead, the U.S. Department of Commerce was merely exercising its EPCA case-by-case authority over the oil export market by granting limited waivers to just two U.S. companies, while re-affirming that there has been "no change in policy on crude oil exports." Only a handful of such waivers have been granted in 40 years.

Still, the Administration's action is a positive step towards what *should* happen: a wholesale legislative reversal of the export ban, such that productive U.S. companies do not have to beg federal permission to sell their products to willing buyers around the world, where demand is surging.

As this Issue Brief will argue, the time has come to revoke the 40-year-old law's ban on oil exports. Such action would open up world markets to all of the small, mid-sized, and large American oil companies (not merely the occasional few that win Washington's regulatory lottery), unleashing yet more production, generating billions of dollars of tax revenues, creating millions more jobs, and reshaping global geopolitics.

I. THE PSYCHOLOGY OF "OIL SCARCITY"

In 1975 Congress passed the EPCA, which incorporated a directive that the President should "promulgate a rule prohibiting the export of crude oil and natural gas produced in the United States, except that the President may...exempt from such prohibition such crude oil or natural gas exports which he determines to be consistent with the national interest and the purposes of this chapter."⁴

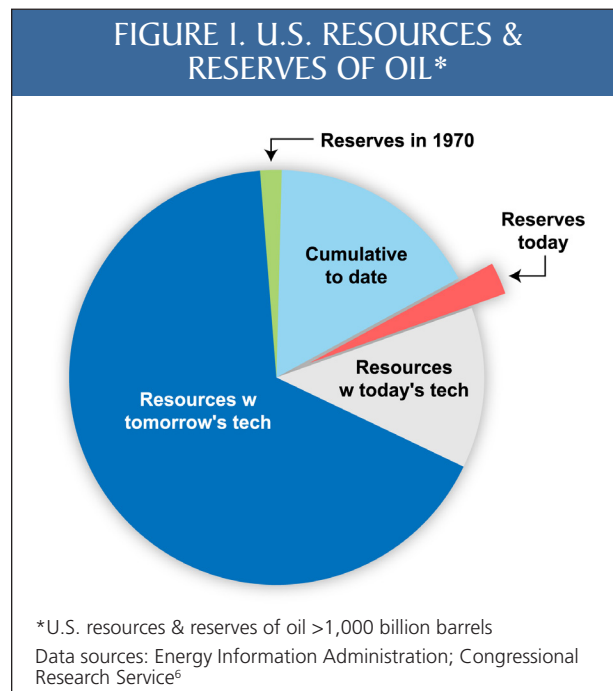
The Act entered into law in a climate of unprecedented fear over U.S. energy security. Indeed after a century of steady growth in American oil output, 1970 marked the start of a sharp, multi-year production decline. The 1973 Arab oil embargo followed,

causing a 400 percent jump in oil prices practically overnight, stunning the U.S. citizenry and policymakers alike. In 1979 a second oil price shock struck, which—along with ensuing decades of declining U.S. output and rising dependence on oil from often hostile, anti-Western regimes—further reinforced the paradigm of domestic scarcity. All this happened in a stew of popular neo-Malthusian worries, and on the tail of best-sellers such as Paul Ehrlich's 1968 *The Population Bomb* and the 1972 Club of Rome's *Limits To Growth*.

Today, widespread illusions of meager U.S. oil resources continue not only with the persistent (though disproven) 'limits' paradigm, but also from a misunderstanding of, and focus on, reported oil "reserves"—a measure that says nearly nothing useful about long-run supply.

Reserves are determined by a combination of factors: corporate decisions to spend money to map a specific project; legally required financial accounting metrics; and, not least, access to technology capable of extracting a specific resource at a market price, all in the short time-frames associated with narrow business decisions. Reserves, in other words, neither measure geophysical reality nor predict technological progress.

FIGURE I. U.S. RESOURCES & RESERVES OF OIL*



In 1970, for example, total U.S. “reserves” were officially reported as about 30 billion barrels of oil (see Figure 1). But from 1970 to the present, the U.S. produced nearly 200 billion barrels from those fields. Today, U.S. reserves are, once again, estimated at about 30 billion barrels. Future production will come from new reserves that expand as time, technology, and financial needs progress, thereby allowing developers to access the vast underlying geophysical resources.⁵

Thus, annual U.S. consumption of about seven billion barrels of oil should be juxtaposed against the nearly 1,000 billion barrels of America’s resources identified by the Energy Information Administration (EIA).⁷ Even that enormous resource figure understates the geophysical reality according to myriad scientific studies, including the U.S. Geological Survey (USGS). For example, one recent USGS report identified between 1,500 and 3,000 billion barrels in just *one* untapped shale region, half of which is thought to be recoverable.⁸ It bears noting that this (largely unheard of) Green River formation resides under mainly off-limits federal Bureau of Land Management (BLM) lands in Utah, Colorado, and Wyoming.

The importance of the psychology of “resource adequacy” is revealed in the results of a remarkable new

survey from FTI Consulting.⁹ The study finds that support for exports amongst both the public and decision leaders increases the greater the belief that America has lots of oil.

The problem: FTI’s poll also found that among D.C. “elite decision leaders”, just 22% of Democrats, 31% of Independents, and only a slight majority (58%) of Republicans believe “domestic oil resources are abundant.” Similarly, the poll found a mere 14% of the general public and just 34% of D.C. elites know that U.S. oil production is growing at a torrid pace.

II. THE NEW OIL ORDER

We now have abundant evidence that the energy neo-Malthusians were wrong. Continually evolving technology, and the transformation of global markets—wherein America has converted from a growing consumer to an expanding producer—has permanently restructured today’s world order.

In a few short years, thousands of small and mid-sized companies, using modern smart-drilling technology, have turned America into the world’s fastest growing (and soon to be largest) producer of hydrocarbon liquids.¹⁰ In six years, oil production has expanded

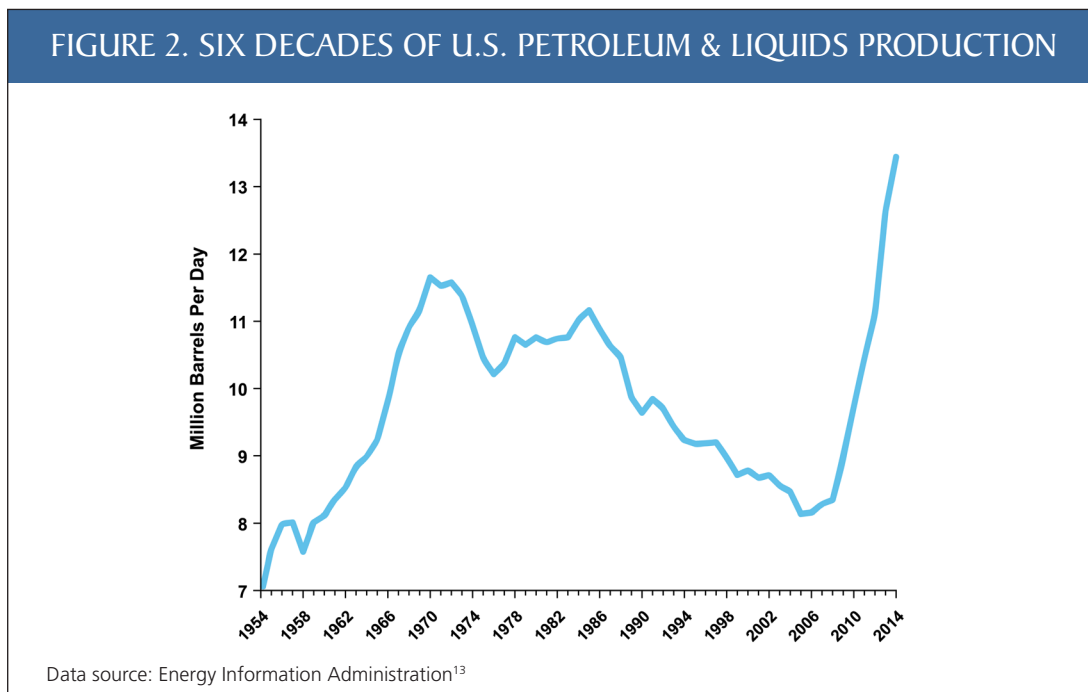
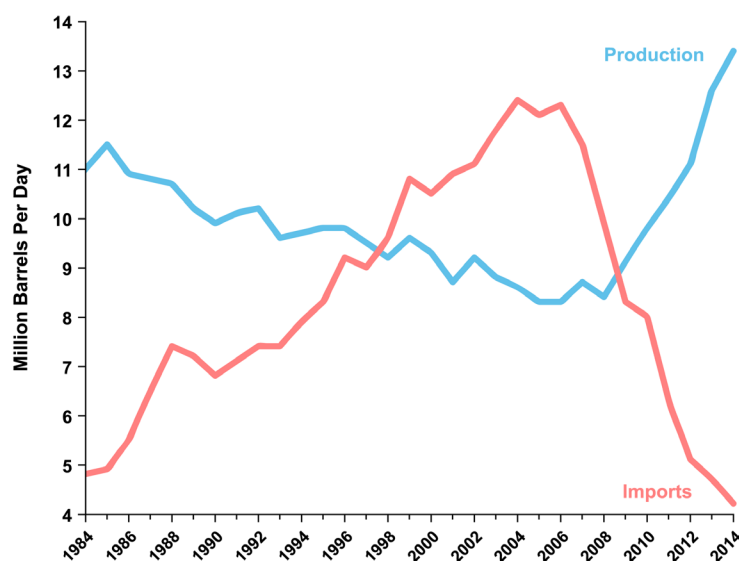


FIGURE 3. U.S. PRODUCTION vs IMPORTS: PETROLEUM & OTHER LIQUIDS



Data source: Energy Information Administration¹⁶

nearly 50 percent.¹¹ All this activity has added some one million jobs to the U.S. economy.¹² By the end of 2014, U.S. oil production will surpass levels not seen in a half-century—and will continue to grow.

Consequently, the U.S., which imported 60 percent of its oil only a decade ago, saw import dependency drop to just 33 percent in 2013—and is on track to see dependency drop to just 23 percent by 2015, according to conservative estimates by the EIA.¹⁴ In a few more years, bullish forecasts see America becoming a net oil exporter.¹⁵

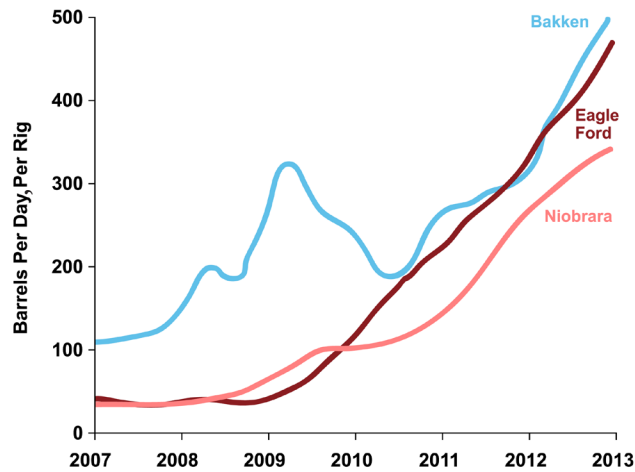
The critical point is that today’s oil abundance has not arisen from new “discoveries”—the shale fields have been known for ages, with the USGS mapping many a century ago¹⁷—but from technology progress, in particular from smart drilling. Consider one measure of technology: from 2007-11, twice as many patents were issued for hydrocarbon-related energy technologies as for all non-hydrocarbon energy areas combined.¹⁸ While patents are directionally predictive, it is with operational productivity that we see a clear measure of the pace of technological progress. Figure 4 illustrates the rapid, recent gains in the productivity of a shale-oil rig. This alone explains

why America is experiencing an oil (and natural gas) boom—and why the traditional practice of simply counting drilling rigs is an insufficient measure of oil production.

In well under a decade, the industry has seen remarkable productivity gains not only in output per rig, but in all measures including: wells per rig, distances drilled per rig, and speed of deployment, all at no significant increase in costs.²⁰ There is, moreover, much pent-up shale-related technology yet to be unleashed.²¹

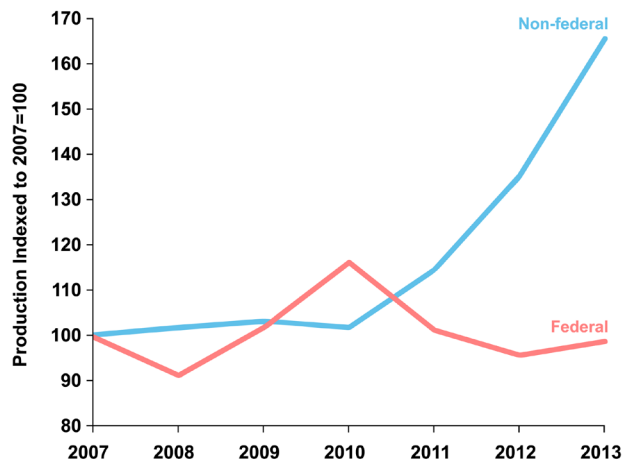
Meanwhile, existing technology could unleash even more from largely untapped federal lands—which account for over half of the continental U.S. and 80 percent of off-shore territory. But thus far, the Congressional Research Service (CRS) has documented that all of the growth in U.S. oil (and natural gas) output has occurred on private and state lands (Figure 5).²² The main reason? While it takes typically from one week to one month to obtain a state drilling permit, it takes at least ten *times* longer to get a permit on federal land.²³ Worse yet, the average time for a federal permit has risen from 218 days in 2006 to 307 days last year.²⁴

FIGURE 4. GROWTH IN OIL RIG PRODUCTIVITY IN MAJOR U.S. SHALE OIL FIELDS



Data source: Energy Information Administration¹⁹

FIGURE 5. CHANGE IN U.S. OIL PRODUCTION: FEDERAL LANDS vs PRIVATE & STATE LANDS



Data source: Congressional Research Service²⁵

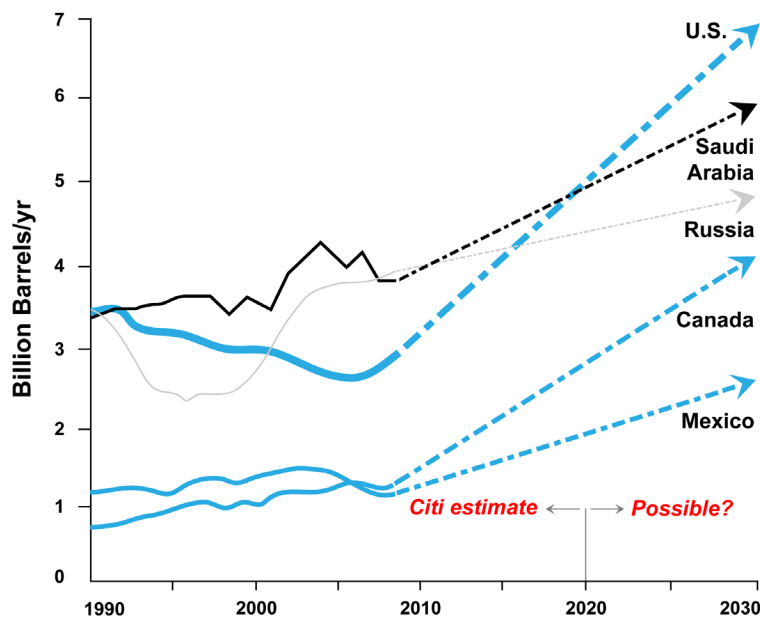
III. THE POTENTIAL FOR EXPORTS

With soaring world demand but slow growth in U.S. oil consumption, the potential for productive American companies to sell into global markets is greater now than at any time since the turn of the 20th century. The combination of this new reality, along with technology-enabled domestic productivity, creates an extraordinary opportunity for an unparalleled geopolitical, economic, and jobs wind-

fall in the United States. Realizing this opportunity will, of course, depend on pursuing policies that not only allow recent trends to continue, but encourage them too.

Oil remains essential as ever for transportation, and will be for decades.²⁶ Indeed, with an anticipated growth in air traffic measured in trillions more air miles²⁷, as well as nearly a billion more cars²⁸ added to the world over the coming few decades, global oil

**FIGURE 6. THE OPPORTUNITY FOR U.S. OIL DOMINANCE:
FORECAST OUTPUT FROM MAJOR PRODUCERS**



Source: "Unleashing The North American Energy Colossus," Manhattan Institute, Mills, 2012

demand is on track to rise by an amount equal to adding an *entire* U.S. worth of consumption (see Figure 7). If policymakers desire cheaper, more abundant oil, they should unleash domestic producers to make more of it *and* supply global markets.

The new American abundance has driven expansions in refineries,³⁰ the construction of thousands of rail tanker cars,³¹ as well as more than 80 new pipelines.³² And many existing pipelines, originally built to carry imported oil inland, have had their flow direction reversed to accommodate the complete reversal of where oil is produced.

But even as more infrastructure is completed to handle the new output, producers of crude oil are deprived of the freedom to select the most profitable path to markets, in particular higher prices offered by overseas buyers. Without unfettered access to global markets, the full productive capacity of America's hydrocarbon businesses cannot be unleashed.

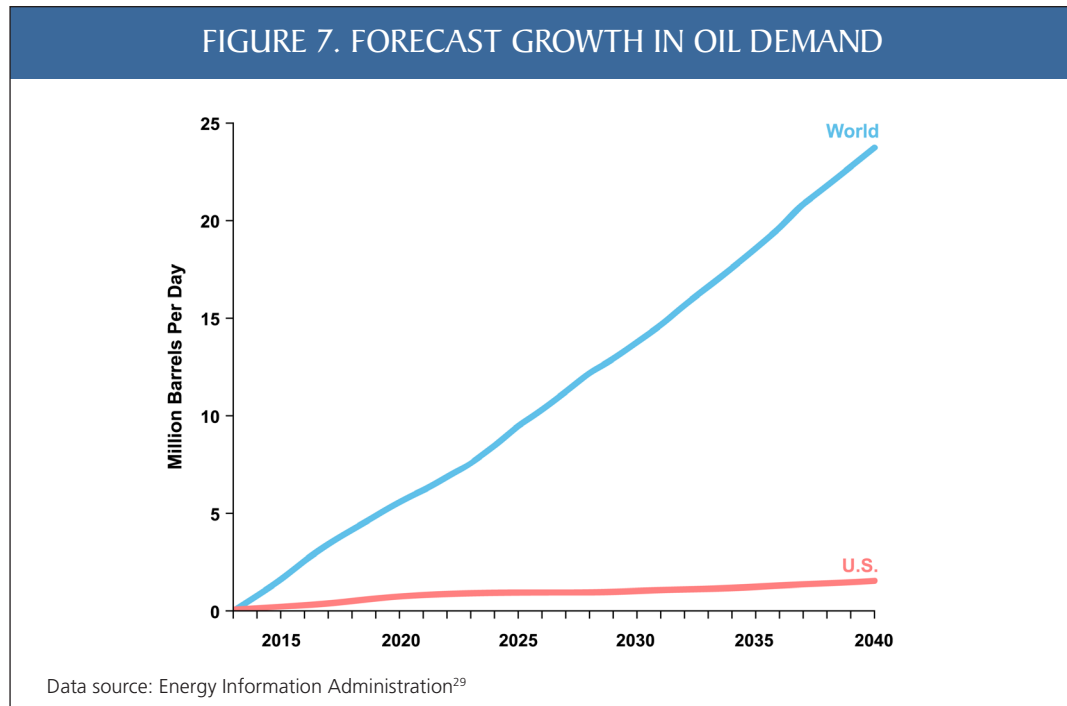
The current U.S. ban on crude exports, it should be noted, does not extend to selling *refined* oil products,

like gasoline, diesel, and aviation fuel. In fact, just a few years ago, the U.S. became a net exporter of refined oil products for the first time since 1949.³³

Other potential benefits of repealing the ban on crude exports are numerous. Repeal is small-business friendly. Thousands of small, independent American oil companies, not "big oil," created the recent shale-oil boom. It is also small and mid-sized companies that are responsible for 75 percent of all domestic oil and gas production.³⁴ Moreover, every oil-field job created gives birth to four or five related domestic jobs, from services and hospitality, to transportation, manufacturing, and education, the majority of which are in small businesses too.³⁵ In every domain, it is the small business sector, a long-favored political constituency, that constitutes the epicenter of job growth.

As such, opening up world markets to domestic producers, thereby stimulating greater production, would add another million American jobs to the more than one million already created in the past half-dozen years in the oil and gas sector.³⁶

FIGURE 7. FORECAST GROWTH IN OIL DEMAND



Though not the focus of this Issue Brief, there are also important geopolitical reverberations associated with America's transformation from a dependent state to a global energy supplier.³⁷ Already, thanks to the same new shale field technologies, the U.S. has displaced Russia as the world's number one natural gas producer. The geopolitical impact of this is already being felt, despite the fact that significant natural gas exports will not occur for years because of the construction time required to build multi-billion-dollar facilities to liquefy the gas. By comparison, the infrastructure necessary for exporting crude is inexpensive and can be built practically overnight.

IV. ARGUMENTS AGAINST EXPORTING

Politicians fret that they might be blamed for any future gasoline price spikes if they support lifting the export ban, and thus potentially damage their reelection prospects. Reform will therefore require dispelling popular misconceptions among both the political class and public at large.

At the core of the necessary re-education effort is the need to dispel the myth that, compared to other commodities, oil is a different and, somehow, inherently scarce product.

The first-order determinant of abundance is access to the land that holds any resource, including politically-favored ones like wind or sunlight. Whether energy, minerals, or other resources, once governments allow access to land or sea, it is technology that determines what can be tapped at a reasonable price. Deep-water technology, for instance, unlocked access to the offshore oil resources in the Gulf of Mexico, North Sea, and Brazil's Campos Basin. More recently, smart drilling technology (where hydraulic fracturing was just one feature) unlocked the shales.

To believe the U.S. is in imminent danger of running out of oil requires the belief that we are running out of technology. On the contrary, everything happening in big data, automation, and materials science suggests otherwise—with as much implication for hydrocarbons as for everything else.

As for gasoline prices, economic theory, as well as the long history of other commodities, also points to oil exports creating more global competition and, in turn, lowering average U.S. gas prices. This is also the conclusion of a major new study from IHS-CERA, a respected consultancy.³⁸ And when oil price spikes do occur—inevitable, given geopolitical realities—the

impact on the U.S. economy will be offset by higher revenues and profits flowing to America's exporters, along with an associated reduction in the national trade deficit. There will be no such offset without exports. Moreover proponents of the view that oil—unlike, say, wheat, minerals, or microprocessors—should not be exported, ignore not only basic economic principles, the historical record, and long-standing international trade conventions³⁹, but also the constitutional freedoms of American businesses to sell their products. As the CRS recently observed, existing export restrictions stand in blatant violation of the 1994 General Agreement on Tariffs and Trade, unless the U.S. government claims national security interests to “protect an exhaustible natural resource.”⁴⁰ The latter can no longer be credibly claimed in the 21st century.

Finally, certain U.S. constituencies oppose lifting the export ban because they are currently enjoying a bonanza of cheap domestic crude. This is particularly the case for American refineries, which, for the first time in decades, buy crude at prices below those on world markets because American production has risen so fast, so unexpectedly, that the capability to transport, store, and process it all has not kept pace.

The logic to maintain an export ban to benefit U.S. crude refiners is indistinguishable from forcing, say, American tire makers to sell only to domestic auto companies, while allowing the latter to sell globally. Or, forcing American microprocessor manufacturers to sell only to domestic computer companies, while allowing the latter to sell globally. In addition, since gasoline prices are largely set in global markets⁴¹, the current export ban means bigger profit margins for many refineries, not cheaper gasoline for consumers.⁴²

Nonetheless, U.S. refiners correctly note that their business is also hampered by another outdated law constraining access to *domestic* markets. The 1920 Merchant Marine Act requires all sea shipments between U.S. ports to use ships built, owned, and operated by American firms. Gulf-coast refiners point out that this doubles or triples transportation costs of American-refined gasoline to the U.S. northeast versus to, say, Canada.⁴³ (Protectionist instincts of the

1920 Congress aside, one worthy feature of that Act is the national security goal of preserving U.S. ship building capabilities—though rather than hobble the productive capacity of America's oil industries, a more cost-effective solution should be found.⁴⁴)

As a practical matter, the current ban on exports constitutes an ill-advised mechanism for the government to pick winners and losers across the hydrocarbon supply chain.

V. PROPOSALS FOR CHANGE

According to the White House Office of the U.S. Trade Representative:⁴⁵

“Trade is critical to America's prosperity—fueling economic growth, supporting good jobs at home, raising living standards and helping Americans provide for their families with affordable goods and services.”

Trade involves, by definition, both buying *and* selling on world markets. The White House and Energy Secretary Ernest Moniz have recently said that oil exports should be on the table;⁴⁶ the new Commerce Department waivers are a small, promising step in the right direction.

Yet maintaining current U.S. export bans on crude oil represents little more than old-fashioned domestic price controls and Soviet-style industrial policy. That's something that both Presidents Nixon and Carter tried in oil markets, with regrettable results.

The bottom line: It is time for policymakers to embrace the nation's once-in-a-lifetime economic and geopolitical opportunity by pursuing three key steps to re-align U.S. oil policy with the realities of 21st century technologies and the new market dynamics.

1. Repeal EPCA's constraints on crude oil exports. This can be done in due course by Congress, but in the meantime the Administration should explore simply issuing a blanket waiver to all American businesses—instead of merely two companies with the tenacity to navigate the federal bureaucracy to secure one of the rarely granted waivers.

2. Repeal constraints on domestic hydrocarbon shipping created by the 1920 Merchant Marine Act, while seeking a more cost-effective solution to national security interests associated with subsidizing a domestic ship-building industry.
3. Open up and accelerate access to exploration and production on federally-controlled lands, both on-shore and offshore. This would not only boost domestic economic opportunities, but also send a powerful message to the world about U.S. oil export intentions; the geopolitical impact would rival, in the inverse, the 1973 Arab oil embargo.

Of course, policymakers should also ensure that incen-

tives, rather than impediments, comprise the organizing principles underlying sensible federal regulations impacting oil (and all hydrocarbon) production, transport, and processing.

Finally, there is one further way to prime the pump on exports if Congress and the Administration fail to advance positive reform. Instead of seeking permission to sell oil overseas, a brave domestic crude oil producer could litigate to test the legal validity of one of the most outdated statutes on the books. Such an action would surely end up before the U.S. Supreme Court, where we see precedent emerging regarding the Court's intolerance for antiquated statutes restraining economic rights of American businesses.⁴⁷

ENDNOTES

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