## API Chief Economists: The Early Days and the Changing Environment in which they Operated

## **BY RONALD D. RIPPLE**

The American Petroleum Institute (API) began in 1919 primarily as a standards-setting organization for the then still relatively young oil and natural gas industry. Not until 1982 did the API designate a Chief Economist. Since then there have been four Chief Economists, and in this Energy Forum we will focus on the first two, Dr. Michael (Mike) E. Canes (1982-2000) and Dr. John C. Felmy (2000-2016), who together account for the first 35 years of the 39 years of this position.<sup>2</sup>

During their tenure with API (reaching back initially to 1974 for Mike), not only did the energy and political world evolve significantly, but the API also was led by four quite different Presidents. During Mike's tenure, the **API Presidency was** held by Frank Ikard, Charles DiBona, and Red Cavaney. And, John (whose API tenure began in 1998), who initially worked under



Mike Canes

Mike, was Chief Economist with Red Cavaney and then Jack Gerard as President.

Each president came from a different background and hence engaged the use of the API economists differently. Mike notes that Ikard, who had been a Congressman from Texas, leaned primarily on lobbying and did not make much use of the economists. DiBona, on the other hand, was trained as an economist and made considerable use of the economics team to carry out research. Indeed, DiBona served as Executive Vice President under Ikard and was the driving force behind building the internal economics capacity of the API. It was during DiBona's tenure that the position of Chief Economist was created, with Mike being the first designee. John observes that Cavaney initially followed Dibona's lead, but as Mike notes his forte was communications. With this

emphasis, the economists, and others within API, were put through extensive media training. All were expected to at least support the media efforts of the Institute even if they all did not actually front with the media. The remainder of John's tenure was with Gerard, who also came from a strong lobbying background,

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being the previous CEO/President of the National Chemical Industry and before that the National Mining Association.

Their tenure at API, both as analysts and Chief Economists also spanned seven U.S. Presidencies, from Ford through Obama, with about one month of the Nixon Administration at the beginning of Mike's stint. The policy evolutions and variations from these Republican and Democratic administrations reflected and affected the evolution observed in both the domestic and international energy sectors.

Mike and John each came to the API with the requisite economics skills and training, and they demonstrated over the years their ability to adapt to changing environments—internal and external—and to serve the mission of the API as the representative body for the oil and natural gas industry at the highest level. Mike completed his PhD in Economics at UCLA, following study at the University of Chicago and the London School of Economics. He then worked as an



Figure 1

Analyst with The Center for Naval Analyses, where he first met Charlie DiBona. He followed this with a stint as Assistant Professor with the University of Rochester's Graduate School of Management. It was with this education, experience, and an understanding of the economic analyses of price controls and divestitures, quite important to the industry at the time, that he joined the API. He then developed his extensive knowledge of the specific economic workings of the oil and gas markets that provided his foundations to lead and further develop the economics capacity of the API

to serve the industry.

John completed his PhD in Economics at the University of Maryland, after earning his Bachelors and Masters at The Pennsylvania State University. He followed this formal economics training with 20 years of consulting, applying his economic analysis skills to a wide range of industries, including significant work in the energy sectors.



John Felmy

The energy world changed and evolved significantly during their combined tenure. Oil prices rose and fell, and U.S. production continued a decline that began in the early 1970s, until shale brought about an amazing and very unexpected resurgence in domestic production.

Figure 1 provides a crude oil price timeline that Mike and John faced during their tenure with API. It is hard to say who dealt with the more difficult public

relations communication challenges addressing oil price volatility. Clearly the price rise during John's tenure as Chief Economist was larger in absolute terms, however for the rise in the 2000s the public was more conditioned to volatility than it was for the price increases experienced following the first oil price shock in 1973-74. Prior to the early 1970s, oil prices in the U.S. and the rest of the world had been extremely stable. This stability was severely disrupted by the first oil shock. However, the external price shocks came while domestic price controls were in place<sup>3</sup>, so the API economists were first faced with understanding and explaining the implications for the industry and the public of the combination for externally driven price shocks and domestic price controls; they later had to address the implications of the removal of the controls. Throughout this entire period, there was clear need for sound analysis and strong communication skills.

Looking closer to home with the EIA price data for WTI and Brent from the latter part of the 1980s onward, it is clear that volatility ratcheted up. While neither Mike nor John had to deal with explaining a negative price for crude oil, as occurred on April 20, 2020, volatile prices were a part of daily life. Moreover, the volatility, and general persistent price rise during the early 2000s, called upon the API to assist in explaining the causes and dynamics to policy makers and the general public.

Many among the IAEE's *Energy Forum* readership may not be old enough to recall the price controls of the 1970s. This was one of the top issues that the API economists had to address. The oil price controls (ceilings) were part of the overall wage and price controls put in place by President Nixon. The implications of these controls were exacerbated by the first oil price shock. Nevertheless, by today's standards,

the prices and their volatility in the 1970s now seem rather modest, as can be observed in Figures 1 and 2. We leapt from \$1.80 per barrel (amazing to think of such prices now when the lowest retail price for a gallon of gasoline currently exceeds that price per barrel; in 2019 dollars the \$1.80 equates to \$11.85, which still equates to just \$0.30 per gallon of crude oil).

The early 2000s required development of a more complete understanding of a different economic world. Prior to this period virtually all significant crude oil price rises had been primarily driven by supply-side shocks, e.g., the oil embargo (supply reduction) of 1973-74, and the price shocks in 1979-80 related to supply disruptions caused by the Iran-Iraq War. Indeed, the crude oil price decline shock (a significant shock even to U.S.





producers) in the mid-1980s was supply-side driven when Saudi Arabia increased production to discipline OPEC production quota cheaters.

The early 2000s price rise, on the other hand, was driven by the unexpected and unprecedented increase in crude oil demand coming from a rapidly growing China, as well as from India and other developing countries. Such a sustained demand-side-driven price increase was extremely unusual. This led to much debate around what could be driving the increase. Since these are obviously prime economics questions, the API economists, led by the Chief Economist, were called upon to analyze the circumstances and explain it to the policy makers and the public. One significant counter argument to the China demand push on prices was that prices were being manipulated via the futures markets, rather than driven by economic fundamentals of supply and demand balance. The API provided and/ or supported much of the economic analyses that went into that debate. The preponderance of the economic analyses came down on the side of prices being driven by economic fundamentals, with the futures markets (including the role of speculators) primarily providing a relatively efficient forum for price discovery (based on fundamentals) and risk mitigation for physical market participants.

At the peak for the Policy Analysis Department (which contained the economics group and was headed by the Chief Economist) in the API there were roughly 20 economists on staff. As industry conditions evolved the numbers ebbed and flowed so that toward the end of John's tenure there were about six. It was apparently contemplated to disband the entire group and to outsource the economic analysis functions toward the end of the 1990s. Interestingly, the antidumping legal efforts carried out by the group Save

Domestic Oil (SDO) may have saved this function within the API. The charge was that Saudi Arabia and other OPEC members were illegally dumping crude oil into the U.S. market, forcing prices lower, and thus harming domestic producers. In essence, SDO and the counterparties at the time effectively employed all the available oil and gas economics talent in DC and much of the country. This led the API to realize that there are times when external, qualified, economics expertise may be unavailable just when it is most needed to support the industry's interests. This may have cemented the understanding that inhouse economics expertise is indispensable if the Institute is to be able to fully carry out its role of representing the oil and gas industry.

The main method of economic analysis employed was standard price theory, sometimes augmented with econometrics. More sophisticated econometric analyses tended to be conducted by outside consultants and university professors. The bottom line for any of the analysis was that the results must be relatively easily explained to media, politicians, administration policy makers, and be readily encapsulated into TV and radio sound bites for the general public. Communication of the economics ideas and analysis was always the critical point, and it was based on their capacity to deliver on this that the API Chief Economists were chosen.

The API collects and manages significant amounts of industry-related data, which are the primary basis for the statistical analyses conducted inhouse to support oil and gas policy positions, as well as being employed by many external energy economics researchers. The data collection and dissemination functions were at one time independent of the Policy Analysis Department (even though they did report to Mike during his tenure), but during John's tenure this function was brought under his direction. This was likely the acknowledgement of his expertise in this arena (of data collection, management, and marketing) from his years of data management activity in consulting.

While the top-most issues evolved over the tenures of both Mike and John, there were some that continued to be relevant for each of them; indeed some issues like taxes on the industry and questions about pricing certainly predated their tenure and will likely never be off the agenda. During Mike's tenure, the 1970s saw oil industry divestiture and price controls as top issues. During this period Congress was keen to break up oil companies. However, most of us will recall that



Figure 3

by the end of the 1990s and very early 2000s major consolidation was what occurred, with the Exxon-Mobil merger in 1999 and Chevron-Texaco in 2000, to name just a couple of the most significant.

Price controls remained in place until 1981 for crude oil and gasoline, when the last vestiges were abolished

by President Reagan. During this control period frequent shortages of supply occurred. Natural gas price controls lived on until 1993.

Next on Mike's list of top issues was the proposed BTU tax under President Clinton. The initial proposal was to tax energy use based on heat content, and while some modifications were proposed to shift from heat content to cost, the proposal failed to get through Congress. API and most industry companies opposed the tax; two notable contrarian companies were ARCO and Unocal. Some of the concerns about the tax were that it was biased against oil, and it would have effectively favored coal. There was also concern that it would have led to increased demand for imported gasoline over domestically produced supplies. Also, based on API economic analysis

DiBona claimed that the Clinton Administration's cost estimates were far too low and challenged then Energy Secretary Hazel O'Leary to a \$1,000 bet that the Administration's numbers were wrong; economics at work. Since the BTU tax legislation failed to be enacted, we will never know for sure whose analysis was right. However, having inhouse economics capacity—both for analysis and communication, and support from external analysts and researchers provided important tools for the API to support public data-based debate and discussion about an important and potentially significant public policy choice.

John's tenure as Chief Economist saw the massive increase in natural gas and crude oil production that was facilitated by the joint application of horizontal drilling and hydraulic fracturing within the shale geology, as shown in Figure 3. These technological advances changed the face of the oil and natural gas industry in the U.S. and across the world. The U.S. returned to being the world's largest producer of crude oil and natural gas. The industry, largely through the efforts of the API, had lobbied hard for the removal of the ban on crude oil exports, and these arguments were strongly supported on economics grounds, based on both internal API and external analyses. Due to the combined weight of the economics arguments and the resurgence in domestic production, the Obama Administration removed the tight restrictions on the export of crude oil (December 2015). Further significant debate followed regarding the potential economic

consequences of large-scale exports of natural gas in the form of LNG from the lower-48; the U.S. had been exporting LNG from Alaska since 1969. There were weighty arguments and considerable Congressional testimony debating the pluses and minuses of such a development. The API supported the prospect of



exporting the natural gas and argued, on economics grounds, that the U.S. would not see significant domestic price increases, as argued by opponents. The U.S. began exporting natural gas in the form of LNG from the lower-48 in February 2016. We have seen no significant increase in domestic prices, and indeed prices have remained relatively low, and low enough to have stimulated the return of natural gasbased petrochemical processing to the U.S. All of this change provoked significant evolutions in the markets and political tension domestically and internationally. This required (and will continue to require) enhanced economic research and analysis to come to a more complete understanding of the new world energy order.

One of the recurring issues that the oil industry faces, and the API Chief Economists have to address, is the level and volatility of gasoline prices<sup>4</sup> (the same is true for heating oil, especially in the winter for the U.S. northeast, but gasoline captures most of the headlines). However, even following the removal of price controls, gasoline prices were modest and relatively stable during Mike's tenure, compared to John's. Figure 4 reports the weekly price of conventional gasoline published by the EIA from 1991 through 2020. The gyrations observed, and lived through, throughout John's tenure kept him very busy explaining the fundamentals of gasoline pricing relative to crude oil prices. This kept him on the road virtually year-round addressing media and state policy makers across the country. His economics skills, as was also the case for Mike, supported by the API economics team and outside analyses, provided the basis for sound discussions, debates, and communication with the public and policy makers.

Additional long-running issues faced by the industry that occupied much of the time for the economists were taxes, access, and regulations. Governments at both the state and federal level have periodically proposed, imposed, and removed taxes on the industry reaching back to the earliest days of the industry. These required engagement and ongoing communication from the API, on behalf of the industry. From the early days of the position, the Chief Economist's responsibilities for this engagement and communication only expanded.

The access issue relates primarily to attempts by the industry to increase access to federal lands for exploration and development and attempts by the government to limit and withdraw access. A seemingly perennial issue, since the 1970s, is the desire to open up (or to counter those attempting to restrict access) the Alaska North Slope for further exploration and production. This desire to expand industry access reached well beyond Alaska to the Gulf of Mexico (including areas of the eastern Gulf), and interest in opening coastal Atlantic areas. Regulatory issues tended to be focused on pipeline developments, and these obviously continue to engage the industry and hence the API even today.

While Mike and John may not be classified as pioneers in energy economics, they and the teams they assembled within the API laid very strong foundations for the role of economics in fact-based, data-based analyses of critical public policy debates for the energy sectors of the U.S. and the world. And, additionally, through their support, the API has been a longstanding supporter of the USAEE/IAEE conferences, which facilitates and supports the presentation of significant economics-based energy policy analyses.

## Footnotes

<sup>1</sup>I want to thank Mike and John for generously taking time to engage with me to provide the background that makes this piece possible.

<sup>2</sup> The current API Chief Economist is Dr. Dean Foreman, and between Dean and John Felmy was Dr. Erica Bowman.

<sup>3</sup> President Nixon imposed wage and price controls in 1971 with the aim of countering the effects of inflation.

<sup>4</sup> One recurring issue is the so called "rockets and feathers" question, where it was claimed that gasoline prices increase rapidly with crude oil price increases but fall slowly with crude oil price declines. Both internal API and external economic research tend to find no statistically significant differences.

