

Thought Starter on Price Volatility in Energy Markets

Policy Options on how to address price volatility in energy markets

January 2012

I. Introduction

Secure and sustainable access to energy lies at the core of our societies' social and economic development. Yet providing predictable and affordable energy supplies is becoming more and more of a challenge. Rapid and sustained economic growth in emerging market economies and the challenges of expanding production capacities to respond to rising global energy requirements have made price volatility an issue of major concern for countries' energy security strategies.

Since the 2009 Pittsburgh Summit, energy price volatility has been placed high on the G20 Agenda, given that energy prices play a significant role in shaping the overall investment environment and the competitiveness of a number of industry sectors. As a result, and in view of the current economic climate, BIAC is concerned that extreme energy price volatility, if not sufficiently addressed, may severely affect economic activity.

This paper provides business perspectives on the harmful effects of extreme energy price volatility and presents business views on how these effects can be addressed. As defined by OECD, price volatility becomes a problem when the size of price swings is large, their regularity is high and/or their occurrence is sudden. This *extreme* price volatility has serious negative effects on economic growth, as it creates harmful tensions in national and international markets.

II. The Negative Effects of Price Volatility in Energy Markets

Some degree of price volatility as a result of demand and supply imbalances or policy decisions is commonplace and can reflect the cost of using energy at certain times of the day or year. The negative effects of energy price volatility depend on many factors, including the energy market in question, the duration and level of price fluctuations, and the dependence of GDP on energy.

- From the point of view of the business community, extreme energy price volatility is a serious cause of concern as it **fuels uncertainty and insecurity which hurt investor confidence**. As a result, uncertainty is a significant challenge as it may

discourage investments in new infrastructure, which are necessary to meet rising energy demand and stabilize energy prices in the long run.

- High and volatile relative energy prices at the national level **increase production costs for energy intensive sectors**, such as manufacturing and transportation, compromising their competitiveness in the global market and forcing them to cut production and rethink their investment decisions, e.g. by putting off large investments or deciding to invest overseas. This can have spillover effects on a range of industry sectors and lead to reduced economic activity.
- Retail energy price shocks may also affect **consumer behavior**, as uncertainty about future price movements may induce consumers to postpone the purchase of energy-consuming products, causing a reallocation of resources among sectors. Moreover, uncertainty may instigate an increase in precautionary savings and further reduce consumption, amplifying the pressure felt by the real economy as a result of fluctuating energy prices.
- Sudden rising energy prices may lead to **terms of trade deterioration** for energy-importing countries, as the cost of imports increases and global economic activity slows, hurting export-oriented industries. Similar effects may be felt by energy exporting economies whereby the sudden rise in a country's revenues causes the **national currency to soar** which in turn may hurt non-energy related sectors struggling to remain competitive in the global market (a phenomenon known as the 'Dutch Disease').
- Finally, volatility in energy prices and oil prices in particular may **exacerbate price volatility in energy intensive sectors** (such as agricultural products) through higher input costs.

III. Addressing Price Volatility in Energy Markets

In order to address price volatility, BIAC believes that resolute action should be taken at the national and international level.

Foster Investment

Policies are needed that facilitate investor access to different energy resources and encourage investment in energy infrastructure. Ensuring investment is directed towards improving supply and storage capacity, supporting exploration and developing new energy sources is the greatest challenge for public and private actors both in OECD and in non-OECD countries.

Uncertainty about future policy conditions may discourage investors, considering the long planning horizon required for energy production and distribution projects. This is especially true for developing economies. In order for the private sector to be in a position to identify and respond to market needs by investing in infrastructure, it is necessary to put in place a transparent, flexible and predictable investment policy environment that sends the right price

signals to the markets. Well-functioning markets open to trade and investment are essential prerequisites for a flexible energy market that is able to respond to changing conditions and is less affected by extreme energy price volatility. In addition, long-term contracts that are not subject to sudden or frequent change can also help address this issue.

Countries should work together towards eliminating investment barriers, addressing price distortions, and overcoming the ‘not in my backyard’ syndrome in order to enable companies to undertake upstream and downstream investment projects internationally.

Diversify Energy Supply

BIAC believes that all energy options need to be considered. Security of supply can be promoted by obtaining energy from a number of different sources in order to reduce exposure to sudden disruptions, helping to reduce the broader impacts of price volatility resulting from a particular energy source. Therefore, the continuing diversification of energy systems needs to be supported as a priority. BIAC encourages governments to keep all energy options open and avoid choosing “winners” and “losers”.

Increase Energy Efficiency

BIAC believes that stronger investment in energy efficiency is necessary for countries to reduce their energy vulnerability, respond to increasing energy demand and remain competitive in the global market. However, it should be borne in mind that in many OECD member economies, energy intensive sectors have already made great progress in improving their energy efficiency. As a result, when designing policies, governments should take previous efforts into consideration to ensure that companies that took early action with regard to energy efficiency improvements can stay competitive. Policies should therefore be carefully designed so as not to drive funds away from process and product development. They should reflect market realities and be based on integrated policy approaches and sound cost-benefit analysis.

Foster Innovation

Innovation in the energy sector will be crucial for a sustainable and secure supply of energy. Business has an important role to play in innovating and deploying advanced technologies that utilise energy resources more efficiently. While most funding for R&D comes from the private sector, public investment remains crucially important, in particular for fundamental pre-competitive research, which can serve as an important leverage for private research. In addition, the public sector has a key role to play in making sure that the overall policy framework is conducive to innovation and for the necessary investments to come forward. A robust intellectual property rights (IPR) regime should be part of this policy framework as it serves as a fundamental prerequisite for innovation and facilitates the spread of technologies by fostering investment as well as collaborative mechanisms, including joint technology programmes.

International Cooperation

Minimizing the risks associated with price volatility in energy markets requires stronger cooperation between OECD and non-OECD countries, an open and inclusive dialogue with

the private sector, and greater transparency at the international level. Further analysis and work towards achieving harmonisation of the global energy market is necessary.

With respect to policy discussions concerning financial speculation in commodity markets, BIAC recognises the lack of any proven causality between the increased presence of non-commercial participants in commodity markets and world commodity market price volatility. Price movements can be mainly attributed to demand and supply imbalances. Therefore, addressing tensions in economic fundamentals and increasing the overall efficiency of international energy markets should be the main objective. Restrictions on participants in energy and derivatives markets could exacerbate rather than reduce price volatility.

Transparency in energy and derivative markets should be further enhanced, which will have the benefit of promoting liquidity and allowing investors to make informed decisions. Measures to help commodity markets work more transparently and so reduce the potential scope for extreme price fluctuations, such as publication of positions held by investors in all markets, and most importantly enforcement of market abuse rules, should be considered.

Moreover, good political and commercial relations between energy importing, energy exporting and transit countries should be fostered in order to ensure a more sustainable, stable and secure supply of energy. Initiatives, such as the International Energy Forum, which brings together the world's top oil producers and consumers, can help understand and address the factors underlying price volatility. The recent events in Middle East and North Africa have pinpointed the need for adequate spare capacity in order to meet global energy demand as well as the fact that uncertainty concerning stocks availability can distort prices and fuel energy price volatility. BIAC believes that members of the international community need to work together towards releasing more transparent, timely and precise data about existing stocks levels. Adherence to the Joint Organisations Data Initiative (JODI) is a key aspect of this.

National Policies

BIAC also urges policymakers at the national level to maintain energy security at the top of their agendas, as it is an issue that requires a horizontal approach across the government, a balanced policy mix as well as policy coherence. Equally important is the design of reliable and competitive electricity markets that send the right price signals to investors as well as consumers. Governments should be very cautious about the impact of new policies on energy prices and market liquidity. To avoid instigating shocks in energy prices, arbitrary protectionist policies that increase costs and create barriers to the free flow of trade and investment should be avoided.

For investors to feel confident enough to make long-term commitments that will potentially reduce market volatility, governments should design and implement a transparent, sustainable and stable set of long-term policies that are consistent with long-term national needs and less subject to short-term political change.

IV. Conclusion

While it is acknowledged that price volatility is inherent in energy markets, extreme price volatility adds to uncertainty in global markets and undermines investor confidence, in particular in view of the current economic challenges many countries are facing. BIAAC believes that resolute action on addressing the fundamentals of both supply and demand should be taken at the national and international level. In this context, BIAAC looks forward to co-operating with the OECD and the IEA in their continued work on price volatility.