THE DRIVERS OF PENSION AND SOVEREIGN FUND INVESTMENT IN ENERGY FOCUSING ON NATURAL GAS AND GAS INFRASTRUCTURE.

World Pensions Council cofounders Vincent Bazi and M. Nicolas J. Firzli analyse the rise of natural gas as a new asset class for pension and sovereign fund stakeholders in light of the geo-institutional dynamics underpinning asset allocation and investment decisions in an era of macroeconomic uncertainty

Energy and energy infrastructure assets share features similar to those of other "real assets" such as real estate: inflation protection (a particularly valuable characteristic in times of economic crisis and currency depreciation), relatively stable cash flows over long periods of time (which facilitates matching liabilities with returns), diversification (partial decorrelation from traditional "core asset classes" such as domestic equity and fixed income) and lower liquidity (investors cannot "rebalance" or divest rapidly- they're locked in for the long haul). This explains the progressive rise of pension fund investment in infrastructure : energy infrastructure alone now accounting for more than 40% of unlisted infrastructure funds raised annually both in terms of aggregate capital and in proportion of funds established[(1)], with capital raised annually in the asset class more than tripling in the past 6 years.

In many ways, the 2008-2012 economic crisis can be interpreted as a painful, protracted, asset-price adjustment process that follows years of cheap credit, cheap energy and cheap public and corporate governance that generated artificially high returns associated with deliberately underestimated risks…

LE GAZ NATUREL, UN ACTIF RÉEL

Vincent Bazi et M. Nicolas J. Firzli analysent l'émergence du gaz naturel comme "actif réel" de choix pour les fonds de pension et les fonds souverains à l'aune des réalignements macroéconomiques et politiques actuels..

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Stocks and bonds have suffered because institutional investors (principals) have lost faith in the capacity of agents (CEOs and political leaders) to protect the value of the assets in their care (listed companies, national wealth…).

Some tangible assets such as real estate and renewable energy also suffered due to investment excesses: the failure of Solyndra[(2)], the US-based solar-panel maker that went bankrupt in August 2011 after getting $535 million worth of loan guarantees from the Obama administration and the abrupt collapse of the German solar cell industry in the first quarter of 2012 are stark reminders of the risks that go with disproportionate levels of leveraging and the reliance on unsustainable government subsidies and unreasonable fiscal incentives to "stimulate" demand. In many ways, real estate and solar energy assets were de facto owned by "unnatural owners" such as banks, and, when the banks collapsed, by Western governments unable or unwilling to provide fresh capital in a context of fiscal austerity and tighter credit limits.

NATURAL GAS RESHAPING THE GLOBAL ENERGY BALANCE

Unlike inflated real estate assets in the US and Southern Europe or non-viable renewable energy projects in France and Germany, energy and energy infrastructure assets are not "on sale" today

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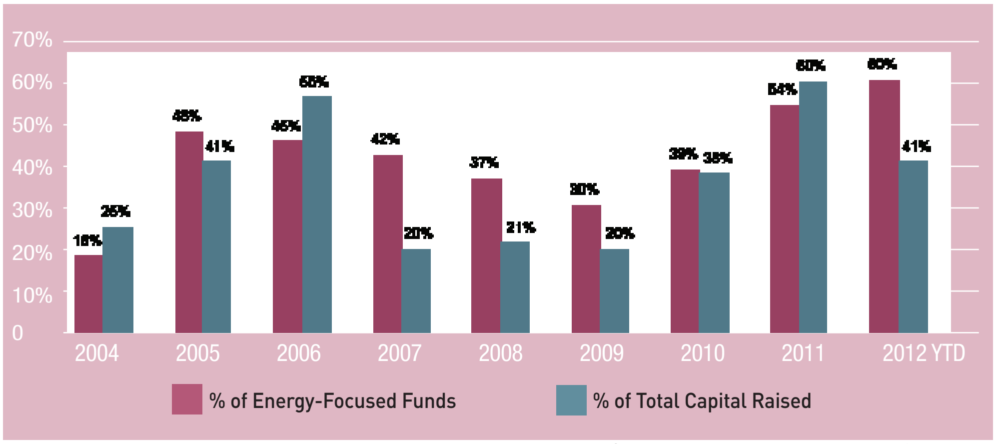
for a very simple reason: global demand will keep on rising steadily in the coming years while supply remains in the hands of a relatively small group of sovereign investors (national oil companies and SWFs), public and private pension funds. The latter represent more than 90% of limited partners (LPs) investing in energy-focused private equity and infrastructure funds, with Canadian institutions such as OMERS, CPP IB, Ontario Teachers' (OTPP) and CDP Quebec playing a leading role amongst institutional investors in unlisted infrastructure. The progressive political emancipation of energy exporters across Latin America and the MENA area is another factor contributing to the relative strength of energy prices in the medium-long-term: unlike their compliant *"compradores"* predecessors, democratically elected populist policy makers are less inclined to accommodate the United States and the European Union when it comes to energy supply. On April 16, 2012, President Cristina Fernandez de Kirchner seized 51 percent of YPF from Spain's Repsol YPF SA, *de facto* confiscating the core energy assets of Spain's largest company, a previously unthinkable move cheered by many populist commentators across Latin America…

In a global survey of public policy makers, pension funds, sovereign wealth funds, and major private equity/infrastructure funds, 64% of respondents expected gas to improve its global market position vis-a-vis other energy sources in the next 10 years vs. only 11% for renewable energy, 23% expecting today's energy balance in favor of oil and nuclear power generation to remain unchanged[3]. In spite of all the talk about a "greening economy" on both sides of the Atlantic, the slow rise of wind, solar and biofuels won't affect significantly the world's energy mix- even if we incorporate the most optimistic investment scenarios assuming sizeable, sustained government subsidies for the sector. In fact, the natural bottlenecks hindering the exploitation of renewable energy sources such as the biofuel vs. food on the table paradox[4] in California and Latin America, the rapid denuclearization of Japan and Germany and the natural limitations of hydro and geo supplies in Europe and the Americas (with the notable exception of Canada and Brazil) means that *"by 2040, oil and natural gas will be the world's top two energy sources, accounting for about 60 percent of global demand, compared to about 55 percent today. Gas is the fastest growing major fuel source over this period, growing at 1.6 percent per year from 2010 to 2040."* [5]

1-PROPORTION OF ENERGY-FOCUSED FUNDS IN UNLISTED INFRASTRUCTURE FUNDRAISING 2004 - 2012 YTD

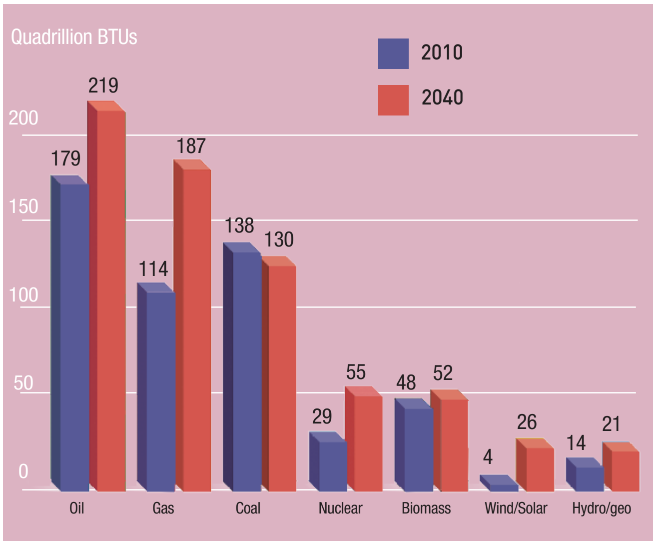


Source: Preqin alternative assets research as of May 10 2012

There are various political and technological trends contributing to the rise of natural gas. Gas is generally viewed as cleaner *in itself* and thus more "modern" than oil and coal, and much safer than nuclear energy, at a time when ecologic sensibilities are playing an important part in the ideological realignment of urban middle-class voters in Japan and Mainland Europe — where Socialist and Social-Democratic parties need the support of the Greens to form coalition governments. More importantly, natural gas is also perfectly suited for a *combined* use in association with renewable energy sources such as wind or solar and for alimenting peak-load power stations functioning in tandem with hydroelectric plants. Natural gas can be transported and stored more easily than oil or coal: apart from gas exploration and production assets (exploration licenses and gas fields), gas pipeline arteries and gas storage facilities have constituted assets of choices for pension and SWF investors in recent years.

AN ACCELERATION OF INVESTMENT

Fossil fuel prices are correlated, but natural gas is generally less volatile than oil- the former benefiting from longer-term contracts and lower demand elasticity for economic, technological and regulatory reasons. A detailed analysis of oil and gas investments (including exploration/production and utilities/infrastructure) in 17 US public pension funds from 2005 to 2009 shows that oil and gas assets have yielded returns on average more than 240% higher than other assets[6], gas infrastructure assets being generally less volatile than gas exploration and production, itself less volatile than oil. In the new age of austerity, large pension funds & SWFs will increasingly supersede governments and banks for the long-term financing of natural gas infrastructure projects as the trend towards increased transfer of public assets continues- notably through public-private partnerships and longer concession periods. Investments in natural gas exploration and production assets and gas infrastructure are key to the international development of Asian[7] and Russian SWFs and Canadian pension funds: that trend was started in 2005, when Ontario Teachers' Pension Plan (OTPP) and the Ontario Municipal Employees Retirement System (OMERS) formed Scotia Gas Network, the UK's second-largest gas distribution company with 6 million customers and 74,000 km of gas mains.



Source: ExxonMobil - Global Energy Supply Outlook

The year 2011 marked a turning point with a series of emblematic events:

• a consortium led by the Canada Pension Plan Investment Board (CPP IB) and the Abu Dhabi Investment Authority (ADIA) acquired a 24.1% stake valued at $3 billion in Norway's Gassled JV, the crown jewel of Northern European gas infrastructure;

• Asia's largest sovereign wealth fund China Investment Corporation (CIC) took a 30% stake in France's GDF Suez's exploration and production division and a 10% stake in GDF Suez's Atlantic LNG liquefaction infrastructure in Trinidad and Tobago for $4 billion;

• Nord Stream AG, a consortium controlled by the Russian government through Gazprom (51%) with minority shareholders from Germany, the Netherlands and France inaugurated its first giant offshore gas pipeline linking Vyborg in Russia to Lubmin in Germany in presence of German Chancellor Angela Merkel, Russian President Dmitry Medvedev and French Prime Minister François Fillon, thus stressing the strategic importance of natural gas infrastructure in the eyes of Mainland European policy makers;

• Private-equity pioneer KKR (who counts US public pensions and MENA area SWFs among its foremost investors) acquired most of Samson Investment Co., an Oklahoma-based company with strategically located shale gas assets for $7.2 billion- the largest ever leveraged buyout of an oil and gas producer and this year's largest corporate buyout by a private-equity firm.

In our opinion, natural gas is set to become the real asset of choice for large pension and sovereign fund investors. Investments in gas exploration and production, distribution, treatment and storage infrastructure are at the *"bloody crossroads"* where geopolitics and financial economics meet: they help explain the strengthening of relations between Russia and Germany as the latter accelerates its exit from nuclear power, the oversized role of Qatar in Middle-Eastern and North African affairs, the recent strategic rapprochement of Israel with Greece and Cyprus to develop undersea gas deposits in the Eastern Mediterranean at a time when Egypt terminates its 20-year gas supply arrangement with Israel, and the remarkable end of Turkmenistan's political isolation as US, Chinese, Russian, Iranian and Turkish institutional investors court Ashgabat, vying for a piece of the world's fourth largest reserves of natural gas . ■

(1) Data compiled by Elliot Bradbrook, Head of Infrastructure Research at Preqin.

(2) Lachlan Markay, 'Green Jobs' Proponents Continue to Tout Solyndra Program as Success', The Foundry/Heritage Foundation, *September 19, 2011*

(3) Josh Posaner, 'Global Gas Infrastructure Survey', Infrastructure Journal (Special Report)*, June 2011, p. 3*

(4) Deepak Rajagopal, Steven Sexton, Gal Hochman, David Roland-Holst and David Zilberman,'Model Estimates Food-versus-Biofuel Tradeoff', California Agriculture, *Vol. 63, N°4, October – December 2009, p. 200*

(5) Kyle J. Countryman et al., The Outlook for Energy: A View to 2040*, Exxon Mobil Special Report, December 2011, p. 8*

(6) Robert J. Shapiro and Nam D. Pham, 'The Financial Contribution of Oil and Natural Gas Company Investments to Major Public Pension Plans in Seventeen States', Sonecon Special Report, June 2011

(7) M. Nicolas J. Firzli quoted in Andrew Mortimer, 'Asia Trading places with the west', Euromoney Country Risk, *May 14 2012 http://www.euromoneycountryrisk.com/Analysis/Country-Risk-Asia-trading-places-with-the-west*

TAGS

ADIA, Asia, Canada, China, China Investment Corporation, CPP IB, Energy, Europe, Exxon Mobil, Gazprom, Germany, GDF Suez, Greece, Israel, KKR, Nord Stream, OMERS, OTPP, Pension Funds, Public Pensions, Real Assets, Russia, Shale Gas, Solyndra, Turkmenistan, Scotia Gas, Sovereign Wealth Funds.