

# A Non-Nuclear Japan Will Implode World's 3rd Economy

by Ramtanu Maitra

Feb. 2—While harsh words and epithets are being exchanged between Beijing and Tokyo, which could develop at any point into a military conflict, Japan's Prime Minister Shinzo Abe, who led the Liberal Democratic Party (LDP) to a December 2012 landslide victory in the Lower House of Japan's Parliament, is riding high on the early results of his economic stimulus. But Abe has new economic worries, as the year-end trade figures show that Japan incurred a \$112 billion trade deficit in 2013. This is Japan's biggest trade deficit since comparable data began to be collected in 1979, according to the Finance Ministry, with the December 2013 figure alone doubling from a year earlier. As the third-largest economy in the world, what happens in Japan has a dramatic impact on the entire world.

## Problems of Being Nuclear-Free

The most significant reason why Japan's trade deficit ballooned is the self-imposed cost of energy to the Japanese economy. The high-cost and high-volume energy imports that have been thrust upon Japan, stem from the fact that, thus far, Abe has failed to restore the nation's nuclear power reactors, shut down by the previous administration in the wake of the earthquake/tsunami disaster in March 2011. Although two plants were reopened early in Abe's administration, the closing of the Ohi 4 nuclear reactor for routine maintenance on Sept. 15, 2013 meant that *all* of Japan's 50 nuclear reactors are now off-line, and the 30% of the country's

power that had been nuclear-generated must be met by imported oil and gas, at a much higher cost and greater environmental risk.

This is the first time since 1966 that the country has been without nuclear power.<sup>1</sup> What was foreseen last September has now become a subject of immediate concern. On Jan. 14, Economics Minister Akira Amari said the government must be vigilant to the widening current account deficit, as it suggests that the country's standing as a major trading nation is wavering. Amari made the comment in a news conference after data showed Japan's current account logged a record deficit in November, as a bulging trade deficit weighed on the country's balance of payments.

But trade is only part of the problem. Japan is a major trading nation, but it is not an export-dependent nation. Actually, exports are a smaller part of Japan's economy (16%) than that of most rich nations, and it hasn't had a big trade surplus since 2011, despite the fact that manufacturing still makes up slightly more than one-fifth of its economy, which is more than most rich countries, barring Germany and South Korea.

The larger problem that Abe faces centers around his economic policy, widely known as "Abenomics," which allowed him to come to power and provide economic optimism to Japanese industrialists, business-

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1. See "Japan Without Nuclear Energy Is a Disaster for the World," *EIR*, Sept. 27, 2013.



Prime Minister of Japan

*Japan's Prime Minister Shinzo Abe faces grave economic challenges, that can only be resolved by reviving Japan's nuclear industry, which has been totally shut down following the 2011 Tohoku earthquake/tsunami.*

men, and citizens alike, but is now being torpedoed by the nuclear-free, costly energy-dependent economic measures.

### **Abenomics' 'Three Arrows'**

"Abenomics," according to Premier Abe, sought to re-energize Japan's economy—which has remained virtually stagnant for almost two decades—through what is referred to as the "three arrows of growth." The first arrow refers to raising government spending to boost economic activity; the second refers to the increase in money supply by the Bank of Japan to increase liquidity and counter the recurring deflation; and the third targets structural reforms in the labor market, agriculture, health care, capital allocations, and international relations.

The first two arrows have been shot since Abe took over in December 2012, but they are already causing concerns. In addition to his inability to reopen the nuclear power plants, the policy has dramatically added to Japan's debt burden. Japan is a very heavily indebted nation, with a public debt of almost \$10 trillion—that is, more than 200% of its GDP. Although Japan does not face a serious threat of externally driven speculative attacks, due to the fact that almost all the debt is domesti-

cally held (unlike all other advanced-sector nations), nonetheless, more than half of Tokyo's tax revenue must go toward servicing this debt, and its increasing weight on the economy has forced Abe to increase sales taxes and other taxes to relieve that burden.

The worsening debt problem could mean more drastic measures from Tokyo will be necessary in the near future, especially when the next collapse strikes in the trans-Atlantic banking system, which is inevitable.

### **Physical Economic Stimulus**

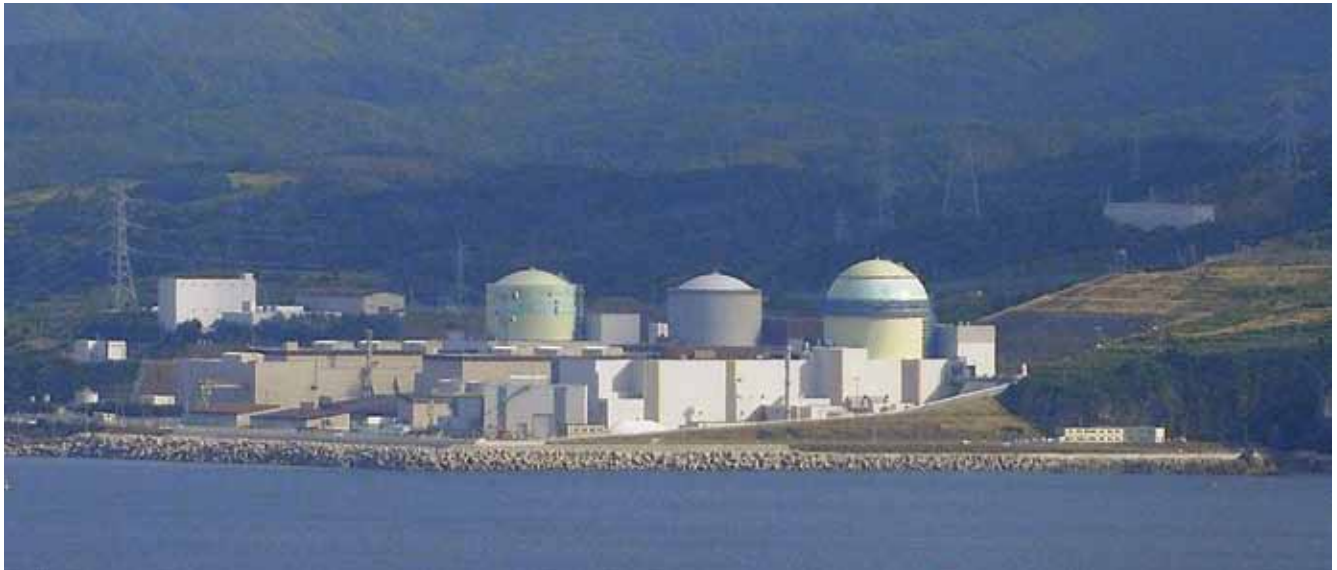
Setting their mission to re-energize the economy, Premier Abe and his economic team did two things which, while potentially very positive for the real economy, risked accruing further debt. In January 2013, Abe announced a massive stimulus package of about \$100 billion earmarked to improve the infrastructure of the country and boost confidence. This was in stark contrast to the policies of the United States and Europe, where austerity rules the roost.

Coupled with this, the leadership of Japan's Central Bank was handed over to Haruhiko Kuroda, a close ally of Abe who formerly ran the Asian Development Bank, who promptly announced an inflation target of 2% (after years of deflation) to be met in the next two years through an increased purchase of government debt.

As a corollary to the stimulus, the yen's value was driven down from 82 to the dollar in February 2013, to 104 to the dollar today—a sharp 20% loss in value. The argument made at the time was that the lower value of the yen would provide Japan's exports a boost at a time when China was capturing the world consumer markets. The rise in import costs would jack prices up within Japan, which the Abenomics advocates considered to be a "good thing" since it would enhance consumer expenditures. Many analysts had concluded over the years that Japan's economic stagnation was caused by the Japanese people's propensity to save, while the low inflation rate that the Bank of Japan had maintained had further encouraged this saving, leaving the consumer market high and dry.

### **Worst Trade Figures Since 1979**

However, all these grand and intricately calculated plans come at a time of a deep global financial/economic



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*Japan's highly advanced and innovative heavy industry, on which the world economy depends, requires nuclear power. Here, the Tomari nuclear power plant in Hokkaido (2008); it was shuttered in May 2012.*

breakdown, with the trans-Atlantic banking system being pumped up artificially with massive, hyperinflationary bailouts and “quantitative easing,” and the entire global financial system on the edge of collapse.

Premier Abe, keeping up the brave front at the Global Economic Forum at Davos last month (a non-event according to all evaluations), told the audience that his country is winning the battle against deflation, the persistent low prices that have plagued Japan's economy for years. “This Spring, wages will increase, and higher wages will lead to greater consumption,” he said. “It is not twilight, but a new dawn that is breaking over Japan.”

Statements issued by the Bank of Japan were somewhat more reserved. It said the economy continued to “recover moderately,” and predicted that inflation would remain well below its target of 2% for some time.

One other factor that led to Japan's long-standing economic stagnation is its corporations' unwillingness to invest. Japan off-shored large chunks of its industries to use locally available resources, and manufacture locally, mostly in China. It is reported that much of the money made in these off-shored industries is not coming back.

### **Buying Costly Energy from Abroad**

Although it is evident that Abe's reflationary policies have driven up the value of export receipts in yen terms,

and boosted exporters' earnings, this is due primarily to the devalued yen. What the feel-good economists had told us earlier is that a spike in import costs would, over time, be more than offset by gains in exports—in a so-called “J-curve” effect from the weak yen.

What is now feared is that the predicted spike may never occur, and that could deliver a death blow to Abenomics. “I don't think many people in Japan want a yen decline to around 120 or 130 to the dollar,” said BoJ economist Nobuyasu Atago, who is now on a stint at the Japan Center for Economic Research. “Many companies have already moved production overseas and may also become hesitant to boost exports for political considerations.”

Why is that spike not occurring? Look at the spike in oil imports and energy prices. The 2013 trade figures tell us that the value of Japan's imports rose by 15% to a record high, while imports of crude oil rose 16.3%, and LNG imports increased 17.5%. Imports of mineral fuels, including crude oil and LNG, accounted for one-third of the total value of imports. What Japan ruefully notes is that the cost of LNG in Asia is rising, to nearly four times the price in the U.S., driven up by the huge Japanese purchases

In other words, Abe's policies could push Japan, one of the most technologically advanced nations in the world, onto a steep economic downhill slope, because he has done little to revive Japan's highly advanced nuclear power sector, which contributed almost 30% of

the country's power requirements before the shutdown. Moreover, under a tsunami of environmentalist lies, a significant segment of the political leadership and citizenry turned anti-nuclear following the Fukushima breakdown, despite the fact that *no one* died from the nuclear accident. If the Prime Minister wants Abenomics to succeed, and to give Japan an economic re-birth, he and his political collaborators must make clear to the people why Japan must have nuclear power, and why it is intrinsically safe.

### **Japan's Nuclear Is Globally Crucial**

Failure to restore the nuclear industry will not only cripple his Abenomics, but Abe will preside over the destruction of a significant portion of Japan's highly productive and innovative heavy industries. Here are some of the reasons why the slowing down of Japan's heavy industry threatens not only Japan, but the entire world's nuclear power-generation capability:

- The largest and best-known supplier of heavy forgings in the world is Japan Steel Works (JSW), founded in 1907 by two British companies and a Japanese partner, Hokkaido Steel & Iron Co. It produces large forgings for reactor pressure vessels, steam generators, and turbine shafts, and claims an amazing 80% of the world market for large forged components for nuclear plants. It supplied the pressure vessels for the first two 1650 MWe Areva EPR plants in Finland and France. It has a 2008 contract with Dongfang Electric Corporation in China to supply forged components, including for reactor pressure vessels to Dongfang (Guangzhou) Heavy Machinery Company Limited in China. JSW is contracted to supply the French nuclear company Areva with large forged parts until at least 2016.

JSW's Muroan plant has 3,000-14,000-ton hydraulic forging presses, the largest of which can take 600-ton steel ingots; and a 12,000-ton pipe-forming press. Its capacity in 2007 was only 4 reactor pressure vessels and associated major components per year, but this was tripled to 12 by early 2011.

JSW has been manufacturing forgings for nuclear plant components to match the U.S. Nuclear Regulatory Commission standards since 1974, and some 130 JSW reactor pressure vessels are in service around the world today. New orders are coming from China, India, and the USA, as well as Europe. And if Abe can restore nuclear power's prominence to where it should be, JSW will be required to supply pressure vessels for the future

Japanese reactors as well.

The world's nuclear industry is interconnected and interdependent on Japan-manufactured engineering products. For instance, France's Areva has secured a contract from India to supply two 1600-MW reactors for installation in Jaitapur in Maharashtra, as part of a plan to set up 9,900 MW of nuclear reactor-generated power in Jaitapur, which would make it the single-largest nuclear power-generating cluster in the world.

However, Areva cannot deliver these large pressure vessels—they have to be forged at JSW! Moreover, India has plans to build 20 GWe of new nuclear reactors in the next 10-15 years. Some of those pressure vessels have to be cold-forged by JSW, no matter who in the West gets the contract to set them up.

- Also, take the case of IHI Corporation, formerly Ishikawajima-Harima Heavy Industries. It is one of Japan's leading heavy-machinery manufacturers, with its 19th- and 20th-Century origins in shipbuilding. Its energy plant segment provides boilers, gas turbines, nuclear-power equipment, BWR pressure vessels and containment vessels, and oil and gas plants. IHI holds a 3% interest in Westinghouse, and collaborates with Toshiba in building power plants. It expects to make pressure vessels and steam generators for Toshiba and Westinghouse PWR nuclear plants, and in 2011, completed a new 2 billion yen factory for steam generators at Yokohama. In February 2009, it received an order from Westinghouse for two AP1000 reactor containment vessels for a U.S. plant.

- Babcock-Hitachi KK was set up by Babcock & Wilcox of the U.K. in 1908 as a boiler parts supplier. In 1953, it became a joint venture of Hitachi Ltd with B&W, and in 1987, the Hitachi Group took it over. It produces reactor pressure vessels, steam generators, containment vessels, and other nuclear-power equipment. It has supplied 15 pressure vessels for nuclear plants, and is also focused on major components for high-temperature gas-cooled reactors and fast-breeder reactors.

If the Abe Administration cannot revive nuclear-power generation in Japan and resolve the ensuing power shortage crisis, it is unlikely that these Japanese firms will be able to deliver any of these pressure vessels and other nuclear-reactor parts needed in India, China, or any other nation in the coming years. A flourishing nuclear industry in Japan, especially in light of the near collapse of the U.S. and German nuclear industries, is a necessity not only for Japan, but for the world.