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Singapore



Singapore can be fairly characterized as a highly developed and successful free-market economy. National authorities managed to establish an open and corruption-free environment that attracts major investments in pharmaceuticals and medical technology production. Additionally, the Singapore economy depends heavily on exports, particularly in consumer electronics, information technology products, pharmaceuticals and on a growing financial services sector. The aforementioned economic environment helped the country to develop a rather robust and viable economy. It is indicative that between 2004 and 2008, Gross Domestic Product Growth (GDP) growth averaged 6.8%. In 2009 it shrunk by 2.1%, mainly due to the global economic crisis but rebounded quickly and in 2010 the government predicts a significant growth.

In order to build up the healthy socio-economic status quo described in the previous paragraph, Singapore has a distinguished philosophy that is underpinned by two principles, strong adherence to a free market economic system and an active pursuit of outward-oriented economic policies.

The adaptation of the free market system can be characterized as an economic necessity for a small country like Singapore. It ensures that the national scarce resources are allocated efficiently and additionally the national industries can respond quickly to market signals and adjust their strategies accordingly. Thus, Singapore government tries not to intervene in the economic life of the country, unless overriding social or political concerns prevail. Furthermore, the government has been careful and rather conservative in its budgetary policy. It is indicative the national budgets are balanced in nearly every year for the last 3 decades. In addition the national monetary policy is steadily oriented towards keeping inflation low and stable. Thus, long-term competitiveness is achieved and also savings are not debased. Finally, the government sets clear and transparent ground-rules and ensures that markets are competitive.



This open economic environment attracted foreign firms which brought capital, technology, management know-how and access to world export markets. Singapore has continuously praised for being an open and competitive economy, a fact illustrated in the World Competitiveness Yearbook 2010, published by the International Institute for Management

Development (IMD), which ranks Singapore as the most competitive economy in the world. The competitiveness ranking is based on four categories measuring economic performance, government efficiency, business efficiency and infrastructure.



The Singapore economy can be reasonably characterized as an open economy, both in terms of trade and investment. Obviously, this is both a matter of policy and necessity for a country of the size and limited resources of Singapore. This economic goal has been achieved as the national trade to GDP ratio in 2009 was 282%, one of the highest in the world. Furthermore, the Singapore government works together

with like-minded countries in international and regional fora to advance the cause of free trade. In addition the country supports international organizations that have as purpose to foster trade among nations like the Asia-Pacific Economic Co-operation (APEC) and the ASEAN Free Trade Area.

Another characteristic of country's economy is its high quality of infrastructure and manpower. Singapore authorities invests in these areas in order to ensure that the education and training system is geared towards the needs of the economy, with a strong emphasis on providing technical and professional manpower.

Singapore has enjoyed spectacular economic growth since 1965. The national per capita *Gross national income (GNI)* in 2009 has reached S\$52,251, 32 times the level in 1965. This economic miracle has been achieved mainly due to the openness of the Singapore economy and the huge capacity that it has to evolve. The global economic crisis brought the economy to a standstill throughout 2009 but during 2010 has started to recover. It remains to be seen if it will keep in this pace.

Kyriazis Vasileios,
Epicos Newsletter Head Editor



Singapore is a small country with limited natural and energy resources. Consequently it has to develop a strategy through which will overcome this handicap and meet the national objectives of economic competitiveness, energy security and environmental sustainability. In order to achieve this critical infrastructure, well-functioning energy markets and international cooperation are needed. Singapore follows in the energy sector the same path as it does for the other sectors of the economy, openness and outward-oriented strategy. Without having oil supplies, the systematic efforts of the Singapore authorities transformed the country into Asia's leading oil hub. Additionally, the liberalization of electricity market led to competitive and affordable electricity prices for Singaporeans.

In order to further delineate the aforementioned framework, the inter-agency Energy Policy Group (EPG) chaired by the Permanent Secretary of the Ministry of Trade and Industry (MTI) has developed a national energy policy strategy that is based on six key points.

The first point is that the Singapore authorities should be committed to the promotion of competitive markets. Through this procedure, energy will continue to be affordable and economic competitiveness will be ensured. The electricity and gas market is the model that will be used. Additionally, Singapore authorities will correct any market failures that will be created by using market-based instruments or imposing standards and regulations.

Energy diversification is the second important point of the new strategy. It will help Singapore to be protected against supply disruptions, price increases and other threats derived from the reliability of supply. In this specific domain the role of the government is to create an open and flexible framework that allows diversification to take place. Nevertheless the realization of the specific point is rather challenging due to the country's limited energy options. Hydro, geothermal and wind power are not an option, whereas nuclear energy is not feasible due to the country's small size. Additionally, there are significant barriers regarding cost and environmental concerns when it comes to solar and coal power.



Another important point is the improvement of energy efficiency. It is natural for a country with a restricted amount of energy resources to try using less energy to obtain the same output. Through this procedure Singapore will achieve a decrease on the dependence that has on energy imports and will enhance its energy security. In order to accomplish this goal the Government has set up an Energy Efficiency Programme Office (E2PO) and developed a comprehensive national energy efficiency plan called Energy Efficient Singapore (E2 Singapore).

Furthermore the country will try to build its own energy industry and invest in R&D. Thus, Singapore will try to turn energy challenges into opportunities by positioning the national

economy and to meet the rising global & regional energy demand. The refining capacity that the country already has will be the model that will lead the way as Singapore will continue to consolidate its status as Asia's premier oil hub. It will expand the range of energy trading products so as to include liquefied natural gas (LNG), biofuels and carbon emission credits. In order to achieve these strong research and development (R&D) capabilities are required.

Its small size necessitates Singapore to promote regional and international energy cooperation, which will enhance the national energy security. Singapore is already a member of various energy-related initiatives in major fora, such as the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation (APEC) and the East Asia Summit (EAS).

The final point of the national energy strategy is that a Whole-of-Government approach should be adopted in order for the policy to be successful. The first step towards this direction was the formation of the Energy Policy Group (EPG) in March 2006, which plays the role of formulating and coordinating Singapore's energy policies and strategies. Several other organizations also play a secondary role in the creation of the national energy policy, such as the new Energy Division in the Ministry of Trade & Industry (MTI), the expansion of the Energy Market Authority (EMA), and the creation of the Clean Energy Programme Office (CEPO).



Singapore is a small country with limited natural resources. Therefore it must create a meticulous policy through which it must enhance its potentiality and promote its key energy interests through various regional and international initiatives. Its new national policy is trying to delineate the way through which this will be achieved.

Kyriazis Vasileios,
Epicos Newsletter Head Editor



Epicos "Project Opportunities" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

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Upgrade of armored military vehicles with state of the art air conditioning and NBC protection systems



As existing military Armored and/or Wheeled vehicles age and fewer new systems are under development or close to be deployed, the needs of the Forces for more reliable and operational capable armored vehicles and state of the art subsystems dictate that these needs can be met by modernization and upgrades on the vehicles the armed forces are currently deploying. A company specializing in the design, development and manufacture of heat exchangers, cooling and air conditioning systems, fuel systems, etc., for military and commercial applications, is proposing the upgrade of military armored (fighting or not) vehicles with state of the art air conditioning and NBC protection systems.

[For Further Information Contact our ICO Department](#)

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The Flexible Developmental State: "The Case of Singapore Electronics Industry", by Jayarethanam Pillai



Singapore economy has been an example of openness, flexibility and development. This book re-examines the conceptual framework of the Developmental State for application to the case of Singapore and especially the national Electronics industry. The study adds to the growing literature on the working of the Singapore public policy system and provides insights into the nature, dynamics and operation of the state and the functions and roles of the policy bureaucracies in particular towards industry development. Original evidence presented provides a distinctive holistic approach to checking results by contrasting research methods. Such approach leads us to a robust validation of the utility of conceptualizing Singapore as a Flexible Developmental State' as well as providing new specific findings, policy suggestions and conclusions on a range of related industry strategy activities and outcomes for Singapore.

Singapore and Asia: Impact of the Global Financial Tsunami and Other Economic Issues, by Chia Wai Mun, Sng Hui Ying



This book is an annual effort by the economists at the Nanyang Technological University to provide analysis, interpretations and insights of contemporary economic issues affecting Singapore and Asia. It tries to delineate two key themes: the global financial crisis (Global Financial Tsunami as it is stated in the book) and other economic issues that affect Singapore and Asia. The global economic crisis has thoroughly affected several countries all over the world and Singapore was one of them. The authors brilliantly tackle pertinent issues such as fiscal and monetary management of the current crisis, impacts of the crisis on the Singapore and Asian economies, policy measures implemented by Singapore and other countries to combat the crisis, and regional efforts to mitigate the adverse impacts of the crisis. A wide range of important economic issues affecting Singapore and Asia, including inflation, exchange rate, workfare, environmental economics, population and worth of human life in Singapore are addressed competently.



Ukrainian energy minister to arrive in Moscow for gas talks

MOSCOW, August 27 (RIA Novosti) - A Ukrainian delegation headed by the country's energy minister, Yury Boiko, is to arrive in Moscow on Friday for talks with Gazprom's management, the Russian gas monopoly's spokesman said. Ukrainian Prime Minister Mykola Azarov said earlier in the week that Ukraine is seeking to revamp the current gas contract it has with Russia as it is "enslaving" and could possibly lead the country into an economic collapse. "Cooperation in the gas sphere is to be discussed," Sergei Kupriyanov said. Russia's Gazprom and Ukraine's Naftogaz signed two 10-year contracts in January 2009, one of which deals with purchase and supply, the other with exchanges and conditions for gas transit via Ukraine to European consumers. That same year Russia allotted a 20% discount to Ukraine from the European price on gas. However, at the beginning of 2010, both parties opted for a market price on gas, which would vary according to the market price of oil. In April, Russian President Dmitry Medvedev and his Ukrainian counterpart Viktor Yanukovich agreed during their meeting in Kharkov in east Ukraine that Russia would grant Ukraine a 30% discount on the gas price of \$330 per 1,000 cu m over the next ten years.

Source: RIA Novosti

Russia unlikely to privatize largest companies in 2010

MOSCOW, August 30 (RIA Novosti) - The Russian government is unlikely to sell stakes in the country's leading companies this year, Finance Minister Alexei Kudrin said on Monday. "We are not setting such a goal for this year. The (privatization) program is meant to bridge budget deficits in the next three years, it was created to do so. We are not likely to sell state assets in large companies this year," he said. The Economic Development Ministry said in July that the privatization list for 2011-2013 included oil pipeline monopoly Transneft, Russia's largest shipping company Sovcomflot, oil major Rosneft, the country's largest banks Sberbank and VTB, the Federal Grid Company of Unified Energy System, the Russian Agricultural Bank, hydropower holding company RusHydro and other assets. Kudrin also said the ministry would work out a privatization plan for years to come by the start of 2011. He said it was reasonable to sell as large a stake as possible in VTB bank providing that the state preserved control. Foreign investors are welcome as the state will only sell non-controlling stakes, he added.

Source: RIA Novosti

Boeing postpones delivery of first 787 Dreamliner to 2011

Aerospace giant Boeing said Friday it will delay until early 2011 the delivery of the first 787 Dreamliner aircraft, originally scheduled for the end of this year.

The confirmation of the delay of the delivery to Japan's All Nippon Airways (ANA) was made in a statement released in the US and Japan, after the maker warned in July it may have to push the date back into 2011.

The company said Friday that it now expects delivery of the first 787 in the middle of the first quarter of 2011.

Boeing said the revision follows an assessment of availability of an engine needed for the final phases of flight testing this autumn.

Source: 2009 AFP, Agence France-Presse (AFP)

Malaysia's new budget terminal to be completed by April 2012

Malaysia's new low-cost air terminal is due to be completed in April 2012 at a cost of more than 2.5 billion ringgit (800 million dollars), officials said at a ground-breaking ceremony Monday.

Bashir Ahmad, head of Malaysian Airports Holdings which runs most of the nation's airports, said the date was later than an earlier target of end-2011 because of delays in building the runway on marshy palm oil plantations.

He said that although the cost of construction was put at 2.5 billion ringgit, "it could be more than that so we will see."

Bashir said the new terminal would be the biggest dedicated low-cost terminal in Asia with a floorspace of 237,132 square metres and able to handle 30 million passengers annually.

It is located less than two kilometres from the main Kuala Lumpur International Airport terminal, much closer than the current budget terminal which is a 10-minute drive away.

The biggest tenant by far is AirAsia, the Malaysia-based pioneer in regional budget travel which fought a long battle with airport authorities over the design and facilities of the new terminal.

AirAsia's spectacular expansion since it was founded in 2001 has seen it outgrow its current terminal, a basic warehouse-like facility which at times has been overwhelmed with passengers.

Prime Minister Najib Razak said at the ceremony low-cost travel at Kuala Lumpur's airports has grown 37 percent annually over the past decade.

"The double-digit growth is expected to continue for the next five to 10 years despite intense competition from other large airports in the region," he said.

AirAsia founder and CEO Tony Fernandes welcomed the start of work on the new terminal and said the carrier would have to accept the delay in completion.

"There's nothing we can do about it. We have to live with it. Of course we would have liked it much earlier, we did feel that the soil was going to be a little bit of a problem but we will make do."

Fernandes said his carrier had been given a guarantee that airport charges at the new terminal would not rise. He said the planned delivery of new aircraft would not be deferred as they could be redeployed to its Indonesian and Thai operations.

Source: 2009 AFP, Agence France-Presse (AFP)

[1st Boeing-built GPS IIF Satellite Enters Service with US Air Force](#)

EL SEGUNDO, Calif., Aug. 30, 2010 -- Boeing [NYSE: BA] today announced that the first of 12 Global Positioning System (GPS) IIF satellites the company is building for the U.S. Air Force has entered service. GPS IIF-1 is the newest member of the active 31-satellite GPS constellation, which provides accurate navigation, positioning and timing information to more than 1 billion military and civilian users around the world.

GPS IIF satellites offer new and enhanced capabilities, including a jam-resistant military signal, greater accuracy through improved atomic clock technology, and a protected civilian L5 signal to aid commercial aviation and safety-of-life applications. According to Air Force officials, on-orbit testing shows that the L5 signal meets all requirements. Based on program plans, the signal will remain in development status, broadcasting test data until initial operational capability is declared. The Air Force will send a message about this to GPS users worldwide.

"Putting the first next-generation GPS IIF satellite into operation is a significant step forward for the Air Force and the millions of warfighters and civilians who depend on this vital system," said Air Force Col. Bernard Gruber, commander, GPS Wing. "Now that IIF-1 is operational, military and commercial receivers around the world can begin using the satellite's improved signals to more accurately determine their position."

Launched on May 27, 2010, GPS IIF-1 has undergone three months of comprehensive on-orbit testing to validate its operations with the ground control system, other GPS satellites and a wide range of military and commercial GPS ground receivers. The satellite's testing regimen was longer and more rigorous than usual because it is the first of the series.

A Boeing space vehicle operations team based in Colorado helped the GPS Wing monitor and evaluate test results as GPS IIF-1 went through many of its first on-orbit operations. With testing complete, the GPS Wing has officially transferred Satellite Control Authority to the Air Force 50th Space Wing and the 2nd Space Operations Squadron, which will operate the satellite on its mission.

"Boeing has built 40 of the 61 GPS satellites launched since 1978, and GPS IIF is a great addition to that long legacy," said Craig Cooning, vice president and general manager of Boeing Space & Intelligence Systems. "These satellites make a difference by adding new levels of power and precision to GPS services. The IIF series will be the backbone of the constellation for the next 12 to 15 years."

Boeing is producing the next 11 GPS IIF satellites using an innovative pulse-line manufacturing approach adapted from the company's aircraft and helicopter assembly lines. The line enables faster, more efficient development of several satellites at once. The company also developed the current GPS ground control infrastructure, called the Operational Control Segment (OCS), which has supported an expanding set of GPS services and capabilities since 2007.

A unit of The Boeing Company, Boeing Defense, Space & Security is one of the world's largest defense, space and security businesses specializing in innovative and capabilities-driven customer solutions, and the world's largest and most versatile manufacturer of military aircraft. Headquartered in St. Louis, Boeing Defense, Space & Security is a \$34 billion business with 68,000 employees worldwide.

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