

# References 'n' Concepts

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1. AFRA, Average Freight Rate Assessment is indicator of freight rates. AFRA results have been published by the London Tanker Brokers' Panel continuously since 1954. They are unique in being the only assessments of their kind, to be recognized by taxation authorities as an acceptable method of charging freight between affiliated companies of multi-national groups. AFRA results are also used by oil traders and government agencies to assess the freight element in various types of oil sale agreements.
2. API, The American Petroleum Institute gravity or API gravity is a measure of how heavy or light petroleum liquid is compared to water. If its API gravity is greater than 10, it is lighter and floats on water; if less than 10, it is heavier and sinks. API gravity is thus an inverse measure of the relative density of a petroleum liquid and the density of water but it is used to compare the relative densities of petroleum liquids. For example, if one petroleum liquid floats on another and is therefore less dense, it has a greater API gravity. Although mathematically, API gravity has no units (the formula is  $\text{API gravity} = ((141.5 / \text{Specific Gravity}) - 131.5)$ ). It is nevertheless referred to as being in "degrees". API gravity is graduated in degrees on a hydrometer instrument. The API scale was designed so that most values would fall between 10 and 70 API gravity degrees.
3. B/L, Bill of Lading, is Official Legal document signed by the captain agents or owners of a vessel, furnishing written evidence of the quality and quantity of cargo for the conveyance and delivery of merchandise sent by sea to a specific destination. It represents ownership of cargo between shipper and carrier.
4. Basic Statistics on Indian Petroleum & Natural Gas 2009 - 10, MoP&NG, GOI, Economic Division, October, 2010.
5. Bombay High, Oil fields are most important offshore oilfield 160 km off the coast of Bombay operated by ONGC India.
6. BRIC nations, the group of countries Brazil Russia India and China.
7. C & F Price, Cost and Freight. Price Includes the Vehicle Price + Shipping freight to the port of your country.
8. CD, Custom Duty (import taxes)
9. CEA, Central Electricity Authority, is a Statutory Body constituted under the erstwhile Electricity (Supply) Act 1948 "Attached Office" of the Ministry of Power.
10. China, Country profile, IEA 2010
11. CIF prices, "Cost, insurance and freight", CIF prices means that the seller delivers when the goods pass the ship's rail in the port of shipment. The seller must pay the costs and freight necessary to bring the goods to the named port of destination but the risk of loss of or damage to the goods as well as any additional costs due to events occurring after the time of delivery are transferred from the seller to the buyer. However in CIF the seller also has to procure marine insurance against the buyer's risk of loss of or damage to the goods during the carriage.
12. CIS countries, The Commonwealth of Independent States, CIS - Russia is a regional organization whose participating countries are former Soviet Republics, formed during the breakup of the Soviet Union.
13. Coal India may hike coal prices; new item in Deccan Herald dated 25 Aug 2000.
14. D6, Oil and gas production well / field, India's biggest oil and gas discovery in the Krishna Godavari basin—D6 block (KG-DWN-98/3) of Reliance Industries Limited.
15. Debt crisis: Economic term to denote a situation where a country or individual for repayment of interest on borrowed money / funds have to further borrow money which leads to a vicious circle of higher and higher interest payments, without the ability to repay the principle and interest.
16. DGH, The Directorate General of Hydrocarbons, DGH was established in 1993 under the administrative control of Ministry of Petroleum & Natural Gas. DGH has been entrusted with several responsibilities like implementation of New Exploration

Licensing Policy (NELP), matters concerning the Production Sharing Contracts for discovered fields and exploration blocks promotion of investment in E&P Sector and monitoring of E&P activities including review of reservoir performance of producing fields. In addition DGH is also engaged in opening up of new unexplored areas for future exploration and development of non-conventional hydrocarbon energy sources like Coal Bed Methane (CBM) as also futuristic hydrocarbon energy resources like Gas Hydrates and Oil Shales.

17. Energy intensity, Unit of Measure. Energy Intensity is a measure of the energy efficiency of a nation's economy. It is calculated as units of energy per unit of GDP.
18. First Raj Krishna Memorial Lecture, 1995: Economic Reforms for the Nineties By Montek Singh Ahluwalia  
<http://planningcommission.nic.in/aboutus/speech/spemsa/msa033.pdf>
19. FOB, Free on Board. FOB is a commercial term used in export import parlance. It denotes all costs involved till loaded to ship / vessel / plane for exports excluding freight and the ownership passes on to buyer from seller once loaded on ship/plane. This means that the buyer has to bear all costs and risks of loss of or damage to the goods from that point. The FOB term requires the seller to clear the goods for export.
20. Fuel Price Trends, State Bank of Pakistan and World Bank Pakistan country report 2009.
21. GDP growth rate world: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>
22. GDP, Gross national product, refers to the market value of all final goods and services produced within a country in a given period. It is often considered an indicator of a country's standard of living.  $GDP = \text{private consumption} + \text{gross investment} + \text{government spending} + (\text{exports} - \text{imports})$ .
23. Income elasticity, Unit of Measure. An economic term, income elasticity measures, the responsiveness of the demand for a good to a change in the income of the people demanding the good, holding all prices constant under the concept of ceteris paribus. It is calculated as the ratio of the percentage change in demand to the percentage change in income. For example if, in response to a 10% increase in income, the demand for a good increased by 20%, the income elasticity of demand would be  $20\%/10\% = 2$ .
24. Indian - Economic Survey 2010 11, Table A-36<sup>1</sup>: <http://indiabudget.nic.in>
25. Indian Midterm plan review 11<sup>th</sup> plan, various chapters:  
<http://planningcommission.gov.in/>
26. International Energy Outlook, 2010, July 2010, IEA, <http://www.iea.org/>
27. JCC, Japan Customs-cleared Crude. JCC is the average price of customs-cleared crude oil imports into Japan (formerly the average of the top twenty crude oils by volume) as reported in customs statistics; nicknamed the "Japanese Crude Cocktail".
28. J. Johnston, Econometric Methods, Second edition, McGraw Hill.
29. LC, Letter of credit. A standard, commercial letter of credit is a document issued mostly by a financial institution, used primarily in trade finance, which usually provides an irrevocable payment undertaking.
30. Market driven pricing: The economic model for price determination of goods and services are known as Market driven Pricing. The model states that in a competitive market the unit price of goods / services will vary and come to equilibrium where the quantity demanded equals quantity supplied at current price.
31. News article, FADA, Transport Freight rates outpace Diesel Price hike, 25.03.11, IFTRT report.
32. NNP, Net national product. NNP is the total market value of all final goods and services produced by residents in a country or other polity during a given period (gross national product or GNP) minus depreciation. The net domestic product (NDP) is the equivalent application of NNP within macroeconomics, and NDP is equal to gross domestic product (GDP) minus depreciation:  $NDP = GDP - \text{depreciation}$ .
33. North sea, Geographic area. In the oil industry terms it refers to areas such as the Norwegian Sea and the UK "Atlantic Margin" (west of Shetland) that are not

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<sup>1</sup> These are the concepts and references used in the text at various places.

- geographically part of the North Sea. Brent crude is refers to a blend of oils from fields in the northern North Sea.
34. NSG: Nuclear Suppliers Group is a 46 countries mainly signatories of the Nuclear Proliferation Treaty established in 1974, in response to the Nuclear test carried out by India to control transfer of technology and equipment of dual use to non-nuclear state.
  35. NYMEX, New York Mercantile Exchange. NYMEX is a Designated Contract Market that offers products subject to their rules and regulations. This is on line commodity market based in New York.
  36. Oil Gram Price Report, Platts Energy, <http://www.platts.com/>
  37. Per capita electricity consumption data statistic file, World Bank: <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>
  38. Pump Priming: Economic policy of increased government spending or reduction in taxes to put more money into the hands of citizens thereby stimulate demand by increased spending.
  39. Report of the Committee on Pricing and Taxation of Petroleum Products, February 2006. Dr C Rangarajan, Committee, GOI.
  40. Report of The Expert Group on A Viable and Sustainable System of Pricing of Petroleum Products, Kirit S. Parikh, GOI, February 2010.
  41. Shale Gas, Shale gas is natural gas produced from shale. Shale gas has become an increasingly important source of natural gas in the United States over the past decade, and interest has spread to potential gas shales in Canada, Europe, Asia, and Australia. One analyst expects shale gas to supply as much as half the natural gas production in North America by 2020.
  42. Structural rigidities, Economic Term. Physical and non-physical condition in economy due to which demand and supply function of products and services do not find natural balance. Like rent control acts, tariff barriers, subsidies, trading rules to inhibit free trade, shortages due to production capacities, etc.
  43. Sub Prime crisis: Economic term used for very risky mortgages or loans where rate of returns (interests) are very high. This term was used for subprime house mortgages, where the rate of defaults was very high due to inability of the borrower to repay the loan.
  44. Swine Flu , H1N1: It is a sub type influenza A virus, which has caused a pandemic in humans in 2010. Certain strains of H1N1 when hit birds are called avian flu and when attack pigs are called swine flu.
  45. The Global Oil Market Beyond 2007: Strategic Issues in Indian Perspective, Ranjan Chaudhuri, Vol. 31, No 4, October-December, 2007, Udyog Pragati NITIE, India.
  46. Tight Credit policy: Monetary policy, which is characterized by high interest rates. The central bank uses its discretion to reduce liquid cash with banks by increasing margin money requirements of banks, SLR ratios or open market operations by buying and selling of government bonds at higher interest rates is known as tight credit policy. This is used to reign in inflation. The opposite is known as easy monetary policy to stimulate economic growth.
  47. WWI, World War I, was a major war centred in Europe that began in the summer of 1914 and lasted until November 1918. It involved all of the world's great powers, the Allies (centred around the Triple Entente) and the Central Powers. More than 9 million combatants were killed, largely because of great technological advances in firepower without corresponding advances in mobility. It was the second deadliest conflict in Western history.
  48. WWII, denotes World war II, was a global military conflict lasting from 1939 to 1945, which involved most of the world's nations, eventually forming two opposing military alliances, the Allies and the Axis. It was the most widespread war in history, marked by significant events involving the mass death of civilians, the Holocaust and the only use of nuclear weapons in warfare, it was the deadliest conflict in human history, resulting in 50 million to over 70 million fatalities.

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29. Pricing Petroleum, H L Zutshi, <http://www.india-seminar.com/2005/555/555%20h.l.%20zutshi.htm>.
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38. Socio Economic Review 1999 to 2010 -11, Gujarat State, Directorate of Economics and Statistics, Government of Gujarat, Gandhinagar.
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46. Various data, Hindustan Petro Corp Ltd, <http://www.hindustanpetroleum.com/>.
47. Various data, Indian Oil, <http://www.iocl.com/>.
48. Various data, working papers and reports, Planning Commission India, <http://planningcommission.nic.in/>.
49. Various Oil & Gas Journals, <http://www.ogj.com/index.html>.
50. Various plan reviews, working papers and annual reports, Ministry of Finance, GOI <http://finmin.nic.in/>.
51. World Bank, various data and articles, <http://data.worldbank.org/>.
52. World Oil Outlook, 2010, OPEC, [http://www.opec.org/opec\\_web/en/](http://www.opec.org/opec_web/en/).