

BUSINESS INNOVATION SYMPOSIUM (E6)  
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MULTI VARIABLE COMPARING SPACE PURCHASING POWER BETWEEN MAIN SPACE  
NATIONS

**Abstract**

In the following study United States and Europe are compared with other nations like Russia, Japan, China and India in terms of their purchasing power. The study shows some interesting results based on the assumptions (like the type of market, period over which the estimates are accounted) made about the space market while conducting the iterations. This study marks the competitive positions of all the nations with respect to each other and gives an insight into their share of the space market in future. Comparison is done using the PPP factor series from OECD and IMF as reference, also CIA fact book has been consulted on the same and a new series of PPP factor has been proposed based on the assumptions and factors considered during the course of study. PPP and not the exchange rate has been used as a means to measure the market share because exchange rates may be distorted by speculative bubbles, exchange market intervention, asymmetric speed of adjustment in goods and asset market or microeconomic shocks. In case of developing markets (like that of India, Japan, China) the divide between purchasing power and exchange rate is even more steep because of difference in relative price of traded versus non traded outputs (the components that are used in the space sector are tradable but the outputs obtained on assembling them are non-tradable, therefore while calculating the purchasing power we need to take into account these factors). Also the PPP estimates of per capita income, and hence the PPP-based weights, more accurately measure the true distribution of real world income, in part because they incorporate a more realistic valuation of non-traded output( such as like that of space sector).