

# Inflation and Commodity Markets



## Hom Nath Gaire

The author is an Economic Analyst at New Business Age Pvt. Ltd, one of the leading business magazines in Nepal. He has a Masters of Economics from TU in the year 2005. He has been actively involved in the study and analysis of economic issues, especially related to financial market for the last 7 years. He also teaches Investment Economics in WLC College, Kathmandu.

It is well accepted that the pace of global economic growth is slowing in recent years. But the general level of prices (inflation) has been rising resulted from financial market turmoil and elevated energy and commodity prices. The reason of the slowing growth and mounting inflation in the world, according to some experts, is global financial crisis of 2008, which was caused by excessive speculation on commodities and real estate derivatives in western economies, particularly in USA.

The nature of current global inflation is not uniform with that of some years back. During the second half of 1990s, diminishing

level of prices (deflation) was the primary cause of slow economic growth, while the case for recent years is just opposite---accelerating inflation and falling growth. According to the IMF's International Financial Statistics, global consumer price index is now increasing by an annual rate of nearly 7-8 percent, compared with less than 4 percent in one decade ago. This speeding up in consumer inflation in large part of the world reflects the impact of higher energy and commodity prices. In such a situation, the debate on---whether the commodity derivative trading stimulates consumer inflation or not, articulating the need for a clear policy on this sensitive issue.

Some people argued that futures trading in commodities allowed efficient price discovery and will not fuel inflation. However, there has been sharp rise in the price of those commodities whose contracts haven't been traded in the futures exchange. In India, the government had set up a committee in 2010, to investigate, if there was any link between prices and commodity futures trading. The committee had concluded: "... no strong conclusion can be drawn on whether introduction of futures trade is associated with decrease or increase in spot price volatility," thus, the futures trade in commodities is not going to make inflation worse.

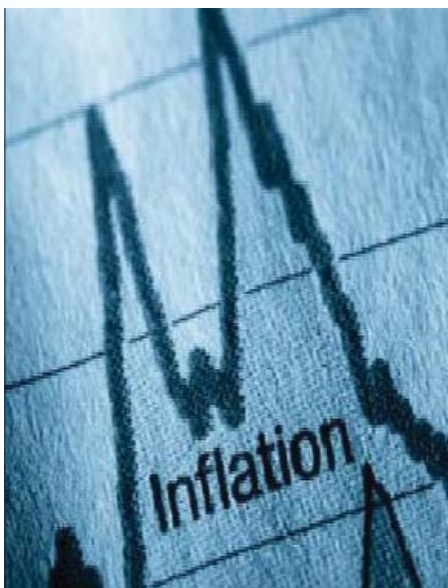
## Experts View

Futures trading in agricultural commodities have often been blamed for high prices and the governments have even suspending trading occasionally. Trading in sugar futures was suspended till June 2010, in India, when prices began to rise tremendously. Futures trading of rice, lentils and other commodities have still been suspended in most of the countries. In line of these back ground, some policy makers have argued that derivative trading of any kind of commodities should not be left unregulated as there are possibilities of manipulating prices of essential goods. They also suggested that government's involvement in supply chain mechanism of food grains is inevitable to control the unwanted price rise due to artificial demand in futures exchanges.

Nonetheless, this situation of rising inflation and slowing economic growth must be taken sincerely, as it confronts the blend of price stability and desired economic growth, the common objective of macroeconomic policies. In nut shell the galloping inflation, in recent years has been challenging the global prosperity one time again after 1970s. Rising energy and food stuffs prices are fundamental to this economic evil. If this trend remained unchecked, we will have to pay relatively higher prices for these items in future fueling up the permanent hyper inflation. However, the relative price shifts and the resulting inflation pressures would not reflect an embryonic overheating of the global economy as of the early 1970s.

### Factors behind High Commodity Price and Rising Inflation

A common question that everyone can ask is why the global economic growth is slowing and the price of energy and commodities are so high, and still rising? The demand and supply of those goods over the past several years provide much of the explanation. Demand for energy and commodities has remained high reflecting the steady growth especially in emerging and developing economies, led by BRICS (Brazil Russia India, China and South Africa). These economies' growth is more energy and commodity-intensive in comparison of more developed economies. In fact, emerging and developing economies have accounted for about 95 percent of the growth in demand for oil since 2003 (IMF). The prospect of continuous expansion in these economies suggests that demand for energy and commodities will remain solid, even as global growth is slowing.



At the same time, the situation of supply has been disappointing. For oil, supply has been getting lower due to geo-political tension in recent years, particularly in OPEC countries. Likewise, costs associated with oil production have increased significantly. Market estimates suggest that average field exploration and development costs have increased from \$5 a barrel in 2000 to more than \$10 a barrel in 2010. As spare capacity and inventories have dropped, the oil market has become highly sensitive to news of supply disruptions and geopolitical events. This has pushed oil prices to all-time highs in real terms, exceeding their previous 1979 peak by some 15 percent (IMF).

In the case of food products, supply constraints are more responsible for higher prices in recent years. Agricultural production costs and associated transportation costs are responding to rising oil prices. Temporary factors, such as droughts and bad harvests in some regions, have also played a role. Prices of base metals, which tend to be the most sensitive to business cycle fluctuations among commodity prices, peaked during 2007/008 and fell by almost 75 percent in 2009 on slowing global manufacturing activity and a recovery in inventories from very low levels. However, prices of these metals in international markets, have recovered most of these losses this year because of supply concerns.

Likewise, CME Group, the largest and oldest commodity market operator of the globe, World Commodity Markets Council (WCMC), the Natural Gas Supply Association (NGSA), and the business

schools of the University of Houston and the Illinois Institute of Technology have concluded that supply and demand fundamentals are at the heart of rising commodity prices. This conclusion is based on the findings of the Organization for Economic Cooperation and Development (OECD) that supply lagging behind demand is the main factor behind price increases in wheat, sugar, cotton, metals, oil and other commodities. With respect to food, bio-fuels policies in some advanced economies are spilling over to the price of key food items, particularly corn and soybeans. IMF estimates suggest that increased demand for bio-fuels accounts for 70 percent of the increase in corn prices and 40 percent of the increase in soybean prices. At the same time, oil prices likely would have been higher in the absence of these bio-fuels, making overall inflation situation more vulnerable.

### Tackling the Problems

Now let's move on to how these problems can be best tackled? According to the IMF, policies will need to adjust both to the reality of permanent relative price shifts and, in some cases, to an overall inflation expectation. A range of representatives from business, academia and the public sectors now came together to discuss potential solutions on ensuring transparent and effective commodity markets in a changing global economic scenarios- rising inflation and slowing economic growth. They have suggested that advanced; emerging and developing economies alike have a role to play in ensuring the demand-supply balances in commodity markets. In such a situation, the following policy measures may be taken to tackle with the problems.



First, given that some portion of the increase in oil price appears to be long-lasting, the pass-through of changes in international oil prices to domestic prices would promote headline inflation in domestic markets as well. To cope with this, a well-targeted policy supports should be put in place to protect the most vulnerable groups. Second, the emerging and developing countries should encourage investment in the oil sector and in energy resources more generally. Third, agriculture policies should be improved in many emerging and developing countries. In the absence of sufficient infrastructure to





increase cultivation and boost productivity, policies should aim to upgrade infrastructure, distribution and storage systems, expand irrigation systems, and redirect subsidies toward high-yield products and key agricultural inputs such as fertilizer.

### Way Forward

The role of every government is to promote economic growth and price stability, as a basis for sustained global growth and prosperity. The recent run-up in energy and commodity prices underscores their macroeconomic significance, putting the inflation risks posed by rising energy and commodity prices.

Thus, central bankers and fiscal policy authorities need to pay close attention to potential inflation risks of commodity market. The goal of the fiscal and monetary policies of the country is to achieve a path of strong and stable growth, accompanied by

low and stable inflation. In achieving this goal in the current circumstances will require a consistent set of policy responses. This should include structural measures designed to improve market efficiency, as well as possible coordination between monetary and fiscal policies.

Economic research aimed at a better understanding of the causes of the recent energy and food price increases, the effect of financial fundamentals on prices of oil and other key commodities, and the impact of fuel and food prices on overall inflation and on the macroeconomic outlook should be conducted on regular basis.

Development of risk management and mitigation tools and strategies along with close monitoring and regulation in

derivative trading of essential commodities, which can create artificial demand for those commodities and ultimately raise inflationary pressures.

The current challenges to global prosperity and progress resulted from rising inflation are potentially serious, and contain many novel elements. However, they can and will be overcome successfully, so long as the responses are appropriate, coherent and consistent in a global context.

# NEPALESE LEGAL REGIME ON AML/CFT



## **Ram Hari Neupane**

Ram Hari Neupane is a Deputy Director of Law Division at, Nepal Rastra Bank. He did his BA in Economics and BL, MPA. He has been associated with NRB since last 13 years.



## **Resham Raj Regmi**

The author has been practicing as an advocate since 2001. He did his LLM in 1999 from Law Campus, Tribhuvan University.



# Experts View

## Introduction

Money Laundering and Terrorist Financing are new terminologies in the Nepalese legal system. We can find different instruments in other countries, developed to control these crimes. Financial Action Task Force (FATF) has issued different principles and standards against the crime of money laundering and terrorist financing. Anti Money Laundering (AML) and Combating Financing of Terrorism (CFT) came in our knowledge after getting membership of Asia Pacific Group on Money Laundering (APG) in 2002. This connection has not only helped Nepal to know the importance of AML/CFT in national economy, but it has also made us aware of our responsibilities towards the international community. Consequently, the Money Laundering Prevention Act, 2008 and Rules, 2009 came into force. These instruments have criminalized the offence of money laundering and financing of terrorism. Different international legal instruments were adopted. The Anti Money Laundering Act, 2008 not only criminalized the money laundering and financing of terrorism, but it also provided for a regime to prevent such crime. The regime has been put in place and it has been operational.

Recently, the Money Laundering Prevention (amendment) Act, 2068 was adopted by the Parliament. This amendment Act has tried to remove the deficiencies of existing laws on AML/CFT. The parliament has also adopted different International Conventions which were made to control predicate as well as Money Laundering related crimes. The conventions adopted by the parliament are UN Convention against Corruption, 2003, UN Convention against Transnational Organized Crime, 2000 (the Palermo Convention) and the UN Convention for the Suppression of the Financing of Terrorism, 1999. Other necessary international conventions to control crimes like ML/TF are already adopted by Nepal.

## Legal arrangement

The AML Act and Rules has provided definition of money laundering and terrorist financing. According to the Act, crime of money laundering constitutes:

*One shall be deemed to have laundered asset, in case he/she himself/herself or any third person acquires, holds, posses, uses, consumes, utilizes or earns or causes to*

*do so; or displays or transacts or causes to do so in any manner the asset obtained, held, possessed, directly or indirectly from commission of any or all of the following offence/s or the assets increased from investment of such assets in any forms or transforms or disguises or transfers such criminally earned assets or causes to do so with an intention to hide, change or evade the source, nature, place, ownership, right, transaction; or obtains, purchases, holds, possesses, uses, consumes or utilizes such assets or causes to do so; or does or causes to do transaction in any form in spite of knowledge of the criminal origin of the asset or with the reasonable ground to believe that the asset has criminal origin; or does or causes to do any kinds of assistance directly or indirectly to transform, change or transfer such asset or causes to do so.*

## Likewise, crime of terrorist financing constitutes

*Any person commits the offence of financing of terrorist activities if that person by any means collects or provides to any person any asset with the intention that they should be used or in knowledge that they are to be used in order to carry out any act which constitutes an offence within the scope determined conventions or any other act intended to cause death or serious bodily injuries to an individual.*

This Act not only criminalized the crime of money laundering, but it also mentioned different crimes as predicate offence as source of dirty money. Generally, dirty money includes illegally earned, transferred and utilized money. Three major source of dirty money are traditional crimes, corruption and tax evasion (Commercial). The Money Laundering Prevention Act includes different crimes as source of illegal money. It also authorizes the Government of Nepal to add other crimes in the list of predicate offence. In money laundering jurisprudence the predicate offences are considered as source of dirty money.

The Act has made provision for the punishment of the offender who is involved in the above mentioned crime. Both fine and imprisonment can be imposed if anyone is found guilty for ML/TF. The amount of fine and time of imprisonment is as follows:

- Imprisonment of 1-5 Years for the person involved in crime of TF.
- Imprisonment of 1-4 Years for the person involved in crime of ML.
- Half of the above mentioned punishment for the person involved in attempt, abet and incitement
- Ten percent will be added if the offender is government employee
- In case of institution's involvement in the crime the chief of such agency shall be considered as offender until the real offender is identified.

## Institutional Arrangements

The Money Laundering Prevention Act has provided different institutional arrangements with certain assignment to control the crime. Some of them are:







- Coordination Committee
- Money Laundering Investigation Department
- Financial Information Unit
- Others

The Coordination Committee is constituted under the Chairmanship of Secretary of Finance. Basic function of this committee is to provide the policy level advice to Government of Nepal in the matter related to AML/CFT. Other members of this committee are Secretaries of Ministry of Law and Justice, Foreign Affairs, Home Affairs and Deputy Governor of Nepal Rastra Bank. The chief of FIU is the secretary of this committee and the FIU the secretariat.

Money Laundering Investigation Department is involved in the investigation and prosecution of the crimes related to money laundering and terrorist financing. Government of Nepal has recently established this Department. A fully authorized department for specific crimes can contribute to control such crimes in a nation.

Financial Information Unit is another unique institutional arrangement of this

law. Established with Nepal Rastra Bank, this unit has been assigned the major job of receiving, analyzing and disseminating the data related to different transaction. In addition to that, the FIU also works as national focal point for AML/CFT activities, secretariat for Coordination Committee, etc. From the date of its inception, FIU-Nepal is working to achieve its objectives as assigned by the Act and Rules.

In addition to the above mentioned institutional arrangements, these instruments has made responsible to the regulators of different sectors to implement the legal provision included in different instruments in the institutions which are under their regulatory jurisdiction. Likewise, the Act also confers some responsibility to both financial and non financial institution to make necessary arrangement to control this crime.

### Conclusion

The above discussion shows that the process to control crime like ML/TF is already initiated in our legal system. But we cannot say that this effort is sufficient as there are still a number of things we have to do.

Basically two things stand out most. First one is effective domestic as well as international cooperation among law enforcement, FIU and other related agencies is necessary. By nature these crimes are multinational and multidimensional, so we need to develop coordinated approach to control such crimes. We need different legal as well as institutional arrangements to ensure this cooperation. Nepalese legal regime is still lacking such instruments. Second is, to start all round efforts to make all stakeholders aware about the importance and implication of this regime. Once competent regime is established and effectively implemented, this will not only contribute to reform in law and order situation of the society, but it will also improve our international image and economic development.

### References

Money Laundering Prevention Act, 2064  
 Money Laundering Prevention Rules, 2066  
 FATF, Forty Recommendations  
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 Different UN Conventions

# ANTI MONEY LAUNDERING (AML) MEASURES FOR COMMODITIES MARKET



**Dilli Ram Neupane**

Mr. Neupane is an advocate. He holds Master's degree in International Law. Currently he works at the Legal Division of Nepal Rastra Bank as an Assistant Director



## Experts View

**M**oney laundering (ML) is the process by which illegally obtained funds are given the appearance of having been legitimately obtained. More specifically this is a process of converting cash or property derived from criminal activities to give it a legitimate appearance. This process involves the placement, layering and integration of illegal proceeds. The criminals generally try to place such funds into financial system unnoticed and then conduct series of transactions so as to obscure the origin of the funds. The whole purpose of the ML for the criminals is to make it difficult, if not impossible, for the state authorities to trace the funds so that they can evade the legal consequences and enjoy the illegally gotten gains.

As it is the financial system that can help the criminals to distance the illegal gains from illegal source and to launder the illegal proceeds, the financial institutions (FIs) including those that conduct commodities futures trading are highly vulnerable to abuses by the criminals. Unless effective preventive measures are put in place, it is highly likely that FIs including commodities futures exchanges become the vehicle for and the victim of financial crimes, including ML. Preventing criminal use of the financial system has thus been a priority worldwide. The FIs are required to function as preventive wall against the financial crimes. International standards and measures have been developed and implemented worldwide so that ML and financing of terrorism can be combated and the integrity of the financial system maintained.

According to AML/CFT (Combating the Financing of Terrorism) standards set by the Financial Action Task Force (FATF), Customer Due Diligence (CDD), record keeping, reporting and internal controls are the measures every FI is required to apply. These measures are to be implemented by all FIs, irrespective of whether they are banks or insurance companies or securities brokers or commodities futures exchanges or brokers



or agents. Industry specific features of these measures are to be implemented.

**Customer Due Diligence:** CDD simply means to identify the person the FI is having business relationship with. However, this, as recommended by the FATF, means (a) identifying and verifying the customer's identification using reliable independent source document, data or information (b) identifying the beneficial owner and verifying the identity of the beneficial owner (c) obtaining information on the purpose and intended nature of the business relationship, and (d) conducting ongoing due diligence of the relationship and scrutiny of the transactions to ensure that the transactions are consistent with the FI's knowledge of the customer, their business and risk profile, including, where necessary, the source of funds. The CDD measure is one of the critical measures the FIs are to implement. This requires the FI to know who the customer is, identify if any other person is benefitting from the customer's transaction, know the intended nature of the transaction and monitor and scrutinize the transactions against the knowledge about the customer and the intended nature of the transaction.

**Record Keeping:** This requires the FI to maintain up to date record of CDD information, the nature and date of transaction, business correspondences with the customer, etc. This requires maintaining record of virtually everything at least for five years even after termination of business relationship. The FI should be in a position to quickly respond to the information request made by the competent authority.

**Reporting:** The FIs are required to report to the Financial Intelligence Unit any suspicious transaction and other transactions above certain threshold as specified by the regulator or competent authority. The FIs are to report to the FIU the transaction when they suspect or there are reasonable grounds to suspect the funds being used in the transactions are the proceeds of criminal or any other illegal activities. The FI should also report suspicious transaction when

they find any suspicion while scrutinizing transactions as part of CDD obligation too. Besides, giving attention to large and complex and unusual transactions which have no apparent economic or visible lawful purpose is another obligation of the FIs. When such transaction is found, it should be reported to the FIU.

**Internal Control:** The FIs should have internal procedure in place to comply with the legal and regulatory requirement as to the AML. There should be a designated officer to ensure compliance with AML/CFT requirements. Screening of the employee while hiring, regular training to the employee and independent audit as to the compliance are the measures to be adopted.

### Conclusion

Every single financial institution has a great role to play for the prevention of crime. AML measures are all about depriving the criminals of criminal proceeds. The FIs are at the very foundation of AML/CFT regime and it is only their strict compliance with the AML/CFT obligation that enables state authority to target the financial base of the crime. In Nepal, Asset (Money) Laundering Prevention Act 2008, Rules thereof 2009 have come into force. The FIU and Department of Money Laundering Investigations (DMLI) have been operational. Industry specific directives as to the AML/CFT obligations have been issued by the FIU to the ranges of institutions, but commodities market is yet to be covered. The ranges of institutions to which the directives have been issued have started reporting transactions to the FIU.

1 This is an international body which sets international standards against Money Laundering (ML) and Financing of Terrorism (FT). It has made forty recommendations against ML and nine special recommendations against FT. These recommendations include preventive measures to be adopted by the Financial Institutions.

2 Financial Intelligence Unit (FIU) serves as a national centre for the receiving (and, as permitted, requesting) analysis and dissemination of Suspicious Transaction Reports (STRs) and other information regarding potential money laundering or terrorist financing. In Nepal, as per the provision of Asset (Money) Laundering Prevention Act, 2008, the FIU is established within Nepal Rastra Bank and it has been fully operational.





# COMMODITY DERIVATIVE MARKET IN NEPAL: ISSUES AND CHALLENGES



**Dr Nabaraj Adhikari**

The writer is a Deputy Director and head of Planning and Development Department and International Affairs, Securities Board Of Nepal (SEBON). He has a Phd in Management and has been involved with SEBON for the last 12 years. He recently performed as the project manager of the "Five - Year capital market development master plan project", funded with the technical assistance of World Bank – First Initiative.

## Historical development of commodity derivative market

The history of commodity derivative market can be traced back to 1688 with the introduction of future trading in rice in Japan. This was followed by an increased participation in commodities derivatives, especially futures, in the industrialised countries like the United States and United Kingdom. In United States, Chicago Mercantile Exchange (CME) was established in 1919 which is presently one of the leading commodity exchanges in the World. The commodity derivative market in India dates back to 1875 when the Bombay Cotton Trade Association was set up to start trading in cotton futures. Subsequently, many other associations have started futures trading in commodities, such as oilseeds in Bombay in 1900, raw jute and jute products in Calcutta in 1912, wheat in Hapur in 1913, and bullion in Bombay in 1920. Presently, there are eight national level commodity exchanges in India. The history of commodity derivative market in Nepal is not very long as compared to world and Indian commodity derivative markets.



In Nepal commodity derivative market started since 2006 with the establishment of Commodities & Metal Exchange Nepal Ltd. The commodity market in Nepal has been growing rapidly with the establishment and operation of five commodity exchanges in a short span of time.

## Significance of commodity derivative market

Commodity derivative market provides a vehicle through which the traders or participants can hedge their risks or protect themselves from the adverse price movements in the underlying assets in which they deal. It enables the consumer to get an idea of the price at which the commodity would be available at a future point of time. Future trading is very useful to the exporters as it provides an advance

indication of the price likely to prevail and thereby help the exporter in quoting a realistic price and secure export contract in a competitive market. Having entered into an export contract, it enables him to hedge his risk by operating in future market. In other words, development of the commodity derivative market provides many benefits to the investor, society and government. Firstly, commodity derivative market enhances price discovery mechanism. In derivative market contract, a trader agrees to receive or deliver a given commodity or asset at a certain futures time for a price which is determined now. Participants get rid of current artificial pricing mechanism of commodities with manifestation of well-developed derivative market. Secondly, investors will get risk hedging and speculating opportunities from this market. Commodity derivative market provides huge investment opportunities

## Experts View

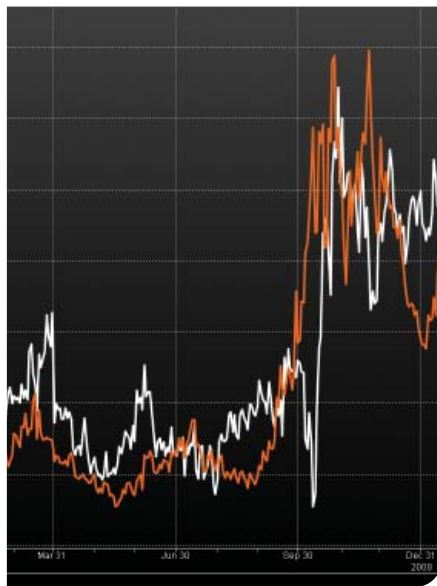
for the investors. There was a traditional belief that investing in the financial asset is good because it provides better returns to the investors, but this notion of investors is changing slowly. For investors who want to diversify their portfolio beyond shares, bonds, and real estate, commodity market offers another option. Commodities offer immense potential to become a separate asset class for market-savvy investors, arbitragers, and speculators. Commodities are accepted as a separate asset class with a unique and distinct source of return.

The trading of standardized and graded commodities will help to introduce quality products in the market that protects consumer's right. The well-developed commodity derivative market also supports to grow financial market in the country. The godowns and warehouses are required to store the commodities for future trading. This arrangement also helps to maintain the buffer stock of commodities in the market. The warehouse receipts might also be the good instruments for bank financing. The bank credit might flow toward the agricultural sector-the backbone of Nepalese economy. Ultimately, the market helps to boost the employment opportunities in the country in agricultural, trading and business and financial sector. Other benefits of commodity derivative market includes: price stabilisation-the altitude of price variation is reduced, leads to integrated price structure throughout the country, facilitates lengthy and complex production and manufacturing activities, helps balance in supply and demand position throughout the year, encourages competition and acts as a price barometer to farmers and other trade functionaries. These benefits together contribute credible and sustainable development of financial market in the country.



### Issues and challenges

Along with the benefits there are some risks of the commodity derivative market as well. The severe global financial crisis of 2008 have put derivative regulation as a hot subject of talks, debates and conversation in various economic, regulatory and market



circles across the globe. With this regulatory tightening was made in United States as well as other developed markets around the globe. For the past five years, commodity derivative market is burgeoning in Nepal without any regulatory framework. The major issue in case of commodity derivative market in Nepal is not the loose/deficient regulation rather it is the absence of regulation which is more dangerous. Hence the need of the hour is to support, develop and enhance the well-functioning and regulated commodity derivative market in Nepal.

The essence of commodity market lies in hedging, arbitrage and speculation. Due to lack of required infrastructures like clearing house, ware house, inspector, central counter party, settlement guarantee fund, disaster recovery mechanism, arbitrary margin determination process, lack of independent product quality assurance and grading institution- standardization/specification, absence of facility of availing reference price and availing depth of the market, less transparency in margin requirements, absence of publishing every day open interest, less transparency in clearing and settlement process, absence of trade related information, and training and awareness building institute, Nepalese commodity market lacks the scope of hedging and arbitrage. Currently the commodity exchanges of Nepal are highly concentrated in trading future contracts of metals, fuels and some foreign market based agro-products.

The price determination of foreign commodities is also not clear, some exchanges have been pegging the NPR vis-à-vis Indian rupees to obtain the exchange



rate between NPR and USD, and others are using the market exchange rate. Trading platforms and system are yet to be certified and audited respectively. Similarly, it is not yet clear whether they have proper contract derivation mechanism, margin fixation mechanism and disaster recovery mechanism. Amid these deficiencies, the estimated daily average turnover of the overall commodity market is approximately NPR.50 million, higher than that of the stock market daily average turnover of NPR.30 million. Stock market is three and half decades old whereas the commodity market had started since 2006 in Nepal. This rapid growth of the Nepal's commodity market has not been accompanied by the real sector's growth including commercialisation of agriculture and overall performance of economy. The deficiencies and rapid growth

## Experts View



show commodity derivative market is being purely speculative market in Nepal. In order to prevent the economy from the unwanted consequences of excessive speculative commodity derivative market and also for sustainable and credible development of commodity derivative market in Nepal, there is a need for a regulatory mechanism with proper rules and regulations as well as autonomous regulator.

In order to safeguard against uncontrolled speculation certain regulatory measures are introduced from time to time in the global commodity derivative markets. They include limit on open position of an individual operator to prevent over trading; limit on price fluctuation to prevent abrupt upswing or downswing in prices,

special margin deposits to be collected on outstanding purchases or sales to curb excessive speculative activity through financial restraints, minimum/ maximum prices to be prescribed to prevent future prices from falling below the levels that are unremunerative and from rising above the levels not warranted by genuine supply and demand factors. During shortages, extreme steps like skipping trading in certain deliveries of the contract, closing the markets for a specified period and even closing out the contract to overcome emergency situations are taken. Briefly, commodity derivative market regulation makes sure that prices discovered for future delivery of the underlying assets are best reflectors of the future situation, traders and producers/processors are able to manage their risks

in a cost-effective way and the risks spread thinly within the economy, reduces market instability and, hence, financial, economic, and political instability.

### Initiatives and prospects of commodity derivative market regulation

To ensure effective and efficient functioning of commodity derivative market, it is necessary that an independent regulator regulates market where participants are prone to collective irrationality. The independent regulator could stop markets/ participants from becoming victims of herd mentality and, thus, play an instrumental role in maintaining efficiency of market in its economic functions.





Government of Nepal has committed to introduce rules and regulation for this market and also has included in tax network. Securities Board of Nepal (SEBON) being a Government agency regulating capital market has been involved in drafting the amendment in Securities Act, 2007 and drafting commodity derivative market regulations. The drafting process has been already completed which has been submitted to the Ministry of Finance for fulfilling the legislative process and approval. Now it is Government prerogative for fulfilling the legislative process of the amendment in the Securities Act and approving commodity derivative market regulations. Further, SEBON has also assessed commodity derivative market in the country with the stakeholders' consultation and prepared supplementary report on five years capital market development master plan, which is implemented through Government budgetary announcement of the current fiscal year.

Commodity derivative is subject to a comprehensive regulatory regime administered and enforced by the government entities that includes, among other things fit and proper criteria for industry participants; functions, duties and powers of exchanges and intermediaries; reporting and record keeping requirements; procedures governing the trading, treatment of customer funds and property; definition of commodity market and commodity intermediaries; licensing and revocation of licenses of commodity exchanges and intermediaries; listing, sales practice, trading limit, administrative measures taken against industry intermediaries, and other conduct of business standards; report on transactions; provisions designed to protect the integrity

of the markets; provision for compensation; statutory prohibitions on fraud, abuse, and market manipulation. In addition, a self-regulatory organization (SRO) may also be set up for self-regulation and enforcement of obligations with respect to operation of the market in a sound manner and free from trading, market or customer abuses.

After the establishment of regulatory set up, the Registrar of Companies will register commodity exchanges with the recommendation of regulator and exchanges have to maintain capital base and necessary infrastructures as per specified provision. Regulator can ask any information needed for inspection and investigation of the market, specify necessary conditions on minimum capital and economic resources considering the status, fair transactions and interest of clients, and regulator with the consideration of Government policy, market status, and investors' interest can issue directives on the transactions of commodities for taking or not taking any action. Regulator will have major concern on fraud transactions, price fluctuations/market manipulation, misstatement, insider trading and accordingly imposes civil and criminal offences against these activities. Regulator will have power in appointing auditor for examining books of accounts of commodity exchanges and intermediaries, and restructuring board of directors of commodity exchanges and intermediaries, and requiring bye laws on listing, clearing & settlement, transfer and establishment and operation of investors' protection funds. Regulator may also restrict trade for specified days consulting with commodity exchanges.



For the benefits of commodity derivative market to the large populace, there is a need to identify tradable commodity useful to all public or economy. Presently investors are overwhelmingly entering in commodity derivative market, however, they are quite unaware to the rights and protection, they do not have united voice, and grievances are being presented only in informal way. Software used in the commodity exchanges should be user friendly, presently it is not being clear whether the exchanges using software are user friendly. Regulator, if provisioned will not delay in conducting

system audit of commodity derivative exchanges. Government of Nepal needs to be serious to have strong regulator for the commodity derivative market along with adequate human resources, technical sophistication and required infrastructures like ware house and inspectors. Further, just assigning the commodity derivative market regulatory responsibility to any regulator is not sufficient in any case. If it is taken in that easy way, it will further deteriorate the credibility and sustainability of the whole financial market and consequently irrecoverable impact in the economy of the country.



### Concluding remarks

Local commodities are not being traded in commodity derivative market in Nepal rather contracts are offered in world commodities based on commodity prices determined in international exchanges. With this the benefits that results from the commodity derivative market in Nepal are limited, amounting to only the taxes paid by and the employment offered by the exchanges and clearing and non-clearing members. As it is globally accepted that significance of commodity derivative market is enormous, it is grossly wise to go for well-regulated market. If the Government of Nepal wish to obtain the benefits of local commodity trading in particular and commodity derivative market as a whole, it would be necessary to enact legislation at the earliest possible to assign the regulatory responsibility to the existing regulator or establish a new regulator for monitoring and supervising the market, a network of warehouses and inspectors for setting and enforcing standards in respect of the quality of commodities and the quantity supplied in each tradable unit of a commodity. Such legislation and enforcement would require considerable resources. It is high time for the Government to go ahead with regulation of the commodity derivative market by committing the adequate number of staff and incentives to do the job properly.



# REMARKS ON COMMODITIES MARKET



**Dipak Raj Lamichhane**

The writer is an Assistant Director of Banks and Financial Institutions Regulation Department of Nepal Rastra Bank. He holds a MBS degree as well as an MA in Economics and a LLB.

A commodities exchange is an exchange where various commodities and derivatives products are traded. Most commodity markets across the world trade in agricultural products and other raw materials (eg, wheat, barley, sugar, maize, cotton, cocoa, coffee, milk products, pork bellies, oil, metals, etc.) and contracts based on them. These contracts can include spot prices, forwards, futures and options on futures. Other sophisticated products may include interest rates, environmental instruments, swaps, or ocean freight contracts. Commodity markets are markets where raw or primary products are exchanged. These raw commodities are traded on regulated commodities exchanges, in which they are bought and sold in standardized contracts.

In the past few years of establishment, Nepalese commodity market has grown rapidly. Due to the possibility of buying the commodity of high cost, just by keeping the margin has attracted many investors. The commodities that are traded in an exchange are of different sizes and cost, which allows investors to select the commodity on the basis of the price change, price of the product, time duration and so on.

SEBON is governing body that regulates the commodities exchanges. It also helps to improve the investors faith in the business. They should organize the awareness program regarding the commodity market and its opportunities and threats. Price discovery mechanism should be made by the interaction of demand and supply of

the buyer and seller for the safeguard of the interest of the farmers. So that the seller gets the full value of its product while the buyers pays the real value of the product without exploitation by the middlemen. Similarly the exchanges should facilitate a warehouse so that the physical delivery of the goods can be possible especially for agro-based products.

SEBON has issued 1st draft of Commodities Market Operation Regulation 2011 that includes the regulation, including others, about the commodities that can be traded in the market. The draft also states that only those commodities approved by and registered at SEBON can be traded. Also, installation of the online trading system in the market has been made mandatory. It



## Experts View



incorporates the policies of good corporate governance, share capital, professional qualifications and experience required in the commodities market.

The world population has reached to 7 billion that requires food security. The commodities used in daily consumption for livelihood are also actively and mainly traded in the commodities market. The commodities price which is determined from the interaction of investor in the commodities market is governed by more profit. It helps to boost the price up resulting inflation and high commodities price that directly hit hard on the livelihood of billions of poor people. Unlike the speculation in the share market, the commodities market is more sensitive affecting many aspects of the social lives. So speculation, undue profiteering attempts should not be in the commodities market. The regulation and supervision of this market should be effective, transparent. The state leadership and policy makers should be cautious to prevent excessive speculation in agricultural commodity markets. Excessive speculation in commodities should be regulated to prevent the speculative bubbles that have been destructive for food and energy security. This should be a crucial talking point amongst the stakeholders and policy-makers.

Although commodity prices have been on the rise globally since 2001, of which Nepal was not an exception. There is plenty of economic justification for it. Most consumers and manufacturers around the world are managing somehow to absorb the sharp price rises in energy and food. Talk of a possible commodity-market bubble has been going on for some time. With the break up between commodity prices and other financial assets, particularly real estate and stocks, the talk is now becoming more important.

The Nepalese investors eyeing to park their investments on the commodities shall consider the following global phenomena.

- U.S. and West European economies constitute half the global economy. Recent

slowdown in these regions would greatly decrease global demand for finished products and the raw materials they are made of. Global demand for commodities would fall, causing a significant fall in prices which has effect on commodities market.

- Surging demand has led raw-material producers to invest huge amounts to increase output. Oil companies have invested in exploration, mining companies have expanded their mining facilities and farmers have cleared new land and invested a fortune in increasing automation and yield-efficiency. Yields have not grown the same way among all commodities, but some may manage to catch up with the excess demand. For some commodities, demand has decreased. This is the essence of every economic cycle. When supply meets demand, there will be a sharp and swift fall in commodity prices.



- Surges in commodity prices often result from wildly speculative gambles, leveraged in part by low dollar interest rates. For example, the "true" price of oil is not USD 110 a barrel, but just USD 80 to USD 90. This price is in keeping with production costs of about USD 40 to USD 60 per barrel. Why has the price of gold gone up? Because investors have chosen gold for the same reason they have chosen government bonds - to seek stability and security. Because of this, current gold prices do not truly reflect a balance between supply and demand, but of fear and speculation. Like the real estate market which has been dominated in recent years by leveraged financial instruments, the commodity market now has such instruments, which inflate prices. Speculators' money will seek an exit, and when that day comes, commodity prices will sink sharply and true investors' money will be at risk.

- The rise of global commodity prices is a mirror image of the falling dollar. The dollar and commodity prices are generally inversely related.

- The last surge in the commodity market began in the 1970s and ended in the early 1980s. Then it was a result of supply-side problems, mainly of oil (the oil embargo and reduced production by OPEC nations). Despite some malpractices, the current surge in commodities price is a healthier one because it results from ever increasing demand, particularly in the large emerging markets of China and India where a quarter of the world's population lives.

- In recent years, the supply of raw materials has been unable to meet demand. For example, oil companies reported that production was actually down last year, despite rising demand. In the area of metals, many countries placed environmental restrictions on mining companies, making it more difficult to dig new mines or expand existing ones. In agriculture, cultivable land area is shrinking amid desertification and various environmental restrictions. Similar limitations also weigh on the fisheries industry, which is struggling to increase output. The difficulty in increasing supply quickly will continue to create shortages, increasing prices further of which Nepal is net importer and can't remain unaffected.

- The soaring price of commodities creates inflationary pressure and BRICS central banks have begun to raise interest rates. But with serious recession concerns, the U.S., U.K, Japan and the European Central Bank already cut interest rates sharply. Lower interest rates will help speculators continue to fuel demand for commodities and increase prices. Lower rates also weigh down on the dollar, so the price of dollar-traded commodities will continue to rise.





# COMMODITY FUTURES: CONCEPTUAL REVIEW AND RECENT TREND & CHALLENGES



**Dr. K.D. Manandhar**

The writer is an Assistant Dean, Faculty of Management, TU. He received his Master's Degree in Commerce in 1972. He was awarded Ph.D. in management for his research work "Corporate Dividend Policy and Practices in Nepal" by FOM, TU in 2002. He has also completed one-year course in IIMA, Ahmadabad, India in 1982/83.

## Commodities

Commodity futures are agreements to buy and sell virtually anything except, for some reason. The primary commodities that are traded are oil, gold and agricultural products.

## Commodities Futures

Commodities futures, or futures contracts, are an agreement to buy or sell a commodity at a specific date in the future at a specific price. Just like the price of bananas/ soya oil/coffee at the grocery store, the prices of commodities can change on a weekly or even daily basis. If the price goes up, the buyer of the futures contract makes money, because he gets the product at the lower, agreed-upon price and can now sell it at the higher,

market price. If the price goes down, the seller makes money, because he can buy the commodity at the lower market price, and sell it to the buyer at the higher, agreed-upon price. More precisely, commodity future contract is an agreement to purchase or sell a commodity for delivery in the future at an agreed upon price that may be satisfied by delivery. Of course, if commodities traders had to actually deliver the product, very few people would do it. Instead, they can fulfill the contract by delivering proof that the product is at the warehouse, by paying the cash difference, or by providing another contract at the market price. Commodity futures are types of derivatives.

## Derivatives

A derivative is anything that is valued based upon some other asset. In other words,

it derives its value from something else. The price of share of stock depends on how the underlying stock performed in the market. The price of coffee depends on the price of the coffee beans.

Stock option is one example of derivatives. It is a call option that gives the buyer the right (but not the obligation) to buy e.g.100 shares of a certain stock at a pre-determined price, is a derivative because the value of the option depends on what the underlying stock does. In the case of NABIL stock options, for instance, whether the stock option makes money, loses money, or breaks even depends entirely upon what NABIL shares do. Thus, the options "derive" their value from NABIL stock. They are a derivative.

## Experts View

Derivative is practiced widely in agricultural sector. Farmers in the state/region are responsible for a lot of derivatives in the developed and developing countries as well. They often want to lock in a price for their crops in order to protect their harvest and calculate the profits they'll make each season. They work with special brokers or companies to sell future contracts on commodities exchanges. These contracts allow them to sell crops they haven't yet grown or which are not yet ready for harvest at a predetermined price. The value of these contracts (what the farmer gets paid) depends on what the underlying commodity does over the period of the futures contract. Again, whether a futures contract makes money, loses money, or breaks even depends entirely on the price of the commodity to which it is tied.

**Types of Derivatives:** There are different types of derivatives in practice in the world. For examples, banks use derivative to protect themselves from interest rates changes. Farmers use them extensively to protect from possible declining price. Employees in startups that are paid with stock options own derivatives.

Insurance contracts are derivatives to protect lenders in case their loans go bad and to protect the depositors against the banks going bankrupt. Energy companies use futures to lock in oil prices when they think they are too high, to protect the company. On the other hand airlines use futures to lock in oil when it's low. There are even weather derivatives to protect certain types of businesses from hurricanes and adverse conditions. Generally, future contracts can include spot prices, forwards, futures and options. Some of the sophisticated derivatives products may include interest rates, environmental instruments, swaps and freight contracts.

### Commodity Exchange Market

Futures markets are very actively traded market in large trading volume. The future contracts of commodities are traded in exceptionally large volume in the commodities exchange markets such as Chicago Board of Trade in Chicago and New York Board of Trade, and the New York Mercantile Exchange in New York, and London Metal Exchange. Mercantile Exchange Nepal (MEX), the largest online commodity future exchange and regulated by various laws of Nepal, among others COMEN, NDEX, commenced its operation



on 5th Jan. 2009 and provides services of future market through clearing and non clearing members on cash settlement daily basis in increasing volume. It trades futures in various commodities such as cash crops, food grains, oil seeds, metals and bullions. Since no one really wants to transport all those materials, what is actually traded are commodities futures contracts or options in commodity exchange market.

A commodities exchange is an exchange where various commodities and derivatives products are traded. Commodity market is growing fast across the world trade with agricultural products and other raw materials like wheat, barley, sugar, maize, cotton, cocoa, coffee, soya oil, crude oil and metals like gold and silver and contracts based on them being traded ever more increasingly.

### Advantages of futures market

- Makes the public aware in analyzing the forecast of future prices of the most important market goods.
- Makes available the wide variety of underlying instruments to enable to protect against risk.
- Provide a good range of price movement and liquidity,

- Futures markets are available for day trading 24 hours per day.

- Makes the public aware of the risks and benefits associated with the derivatives.
- Provides the opportunities to make riskless profit from market inefficiencies.

### Why Are Derivatives Dangerous

Although derivatives, a powerful tool in financial/commodity market, can help make the economy function by reducing risk for farmers, investors, investment funds, oil companies, startup employees, and more, however, if left unchecked and not effectively regulated, they can introduce "systematic risk". In addition, if the few firms are involved in a massive portion of the total derivatives traded and if one of them went bankrupt, this may lead to the chain effect and cause all of the others to fail, wiping out entire financial system. For example, failure of Lehman Brothers caused global financial crisis.

Besides, as derivatives are very versatile instruments its used by a trader as a speculator rather than hedging and arbitrage, the losses may be even worse. So, derivatives are more risky if it is misused.

## Experts View



### Need of Analysis

Since the derivatives products are versatile instruments, if rational analysis is used, it provides significant benefits and thus profit to the participants deciding to form a portfolio of commodity futures. However the opposite is also true and lack of analysis can result in significant losses. Thus fundamental and technical analysis of the derivative market is required to forecast the prices of the underlying asset and a properly balanced portfolio could ensure minimization of market risk as well as liquidity risk.

Maximum gain from futures could be realized only when we can forecast the changes in prices of the underlying assets more correctly. Traders/investors must be capable of analyzing the causes of price change and trend in international markets in the future. Failure to analyze in correct way may cause losses from derivatives products.

There are uncertainties in the future dynamics of process. Thus, increases/decreases in the underlying assets (agricultural such as food and cash crops, metals and bullions, minerals, vegetable oilseeds and oil, tropical beverages) may be

attributed to many causes such as the sudden changes and shift in demand and supply factors, changes in climatic conditions, price trend in the international markets, prediction of production, stock shortage, persistent underinvestment due to depressed prices in the international markets, conflict between neighboring countries supplying the product in the international markets and threat of war, import policy and export policy of major importing and exporting countries, global economic downturn and financial crisis and recovery. Further, increase in commodity derivatives as an asset in the portfolio has attributed to changes in price level, growing financialization of commodity markets has led much to the uncertainties in the price formation of the products and lastly resulted in price shocks.

### Conclusion

Finally, futures contract, a form of derivatives, offers the services of futures trading from automated online system by commodity exchange and is a growing sector in Nepal. Its advantages are in price risk management. Besides, use of leverage enables the participant's higher profit from futures trading. If derivatives are not used properly, it becomes more risky.

Firms dealing in commodity exchange services have the challenge to make the participants aware of the risk of derivatives and counseling, attracting the prospective participants, ensuring and protecting their interests, making them familiar with the system of futures trading and guaranteeing the performance of futures contracts. Corporate governance should be the principle to be followed. Since it is a part of financial system, SEBON has already started planning to regulate and increase surveillance as well as understanding the working of the commodity exchanges in order to ensure efficient and transparent operation.

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# COMMODITY MARKET OUTLOOK



## Kaji Bahadur Dahal

Mr. Kaji Bahadur Dahal is the Executive Director of Management Association of Nepal (MAN). He has also been teaching Financial Derivatives and Engineering, for Masters' and Bachelor's level in number of colleges since 2005. He is the co-author of text book "Fundamentals of Financial Derivatives and Risk Management" published first time in Nepal. He has published the number of articles published in Nepalese Journals. He has also worked as the financial consultant in different research and consultancy firms in Nepal. He has successfully carried out a mini-research project on 'Monetary Policy and Interest Rates of Banks' under the financial assistant of University Grants Commission (UGC), Nepal.

Commodity markets are also called futures markets or futures exchange. Nearly everyone has the feeling that commodity markets are very difficult to understand. In fact, they are not. There are several basic facts that one must know, and once these are understood one should have little difficulty understanding the nature of commodity markets and how they function. First, a commodity futures market (or exchange) is, in simple terms, nothing more or less than a public marketplace where commodities are contracted for purchase or sale at an agreed price for delivery at specified date. These purchases and sales, which must be made through a broker who is a member of an organized exchange, are made under the terms and conditions of a standardized futures contract. The primary distinction

between a commodity market and a market in which actual commodities are bought and sold, either for immediate or later delivery is that in the futures market one deal in standardized contractual agreements only. These agreements (more formally called futures contracts) provide for delivery of a specified amount of a particular commodity during a specified future month, but involve no immediate transfer of ownership of the commodity involved. In other words, one can buy and sell commodities in a futures market regardless of whether or not one has, or owns, the particular commodity involved. When one deals in futures one need not be concerned about having to receive delivery (for the buyer) or having to make delivery (for the seller) of the actual commodity, providing of course that one does not buy or

sell a future during its delivery month. One may at any time cancel out a previous sale by an equal offsetting purchase or a previous purchase by an equal offsetting sale. If done prior to the delivery month the trades cancel out and thus there is no receipt or delivery of the commodity. In fact, only a very small percentage, usually less than two percent, of the total futures contracts that are entered into are ever settled through deliveries. For the most part they are cancelled out prior to the delivery month in the manner just described.

A common misconception is that commodity exchanges determine, or establish, the prices at which commodity futures are bought and sold. This is totally wrong. Prices are determined solely by



supply and demand conditions. If there are more buyers than there are sellers, prices will be forced up. If there are more sellers than buyers, prices will be forced down. Buy and sell orders, which originate from all sources and are channeled to the exchange trading floor for execution, are actually what determine prices. These orders to buy and sell are translated into actual purchases and sales on the exchange trading floor, and according to regulation this must be done by public outcry across the trading ring or pit and not by private negotiation. The prices at which transactions are made are recorded and immediately released for distribution over a vast telecommunications network.

Probably the best way to visualize how purchases and sales are made on the floor of

a commodity exchange is to think in terms of what happens at a public auction. The principle is the same, except in the futures market a two-way auction is continuously going on during trading hours. This two-way auction is made possible because of the standardized futures contract, which requires no description of what is being offered at the time of sale. Also, the two-way auction is made practical because the inflow of both buying and selling orders to the exchange floor is normally in sufficient volume to make buying and selling of equal importance. In a public auction the accent is on selling. The purpose of a commodity exchange is to provide an organized marketplace in which members can freely buy and sell various commodities in which they have an interest. The exchange itself does not operate for profit. It merely provides the facilities and ground rules for its members to trade in commodity futures and for non-members also to trade by dealing through a member broker and paying a brokerage commission.

## The Clearing House

A brief explanation of the clearing house (or clearing association) and its function in futures trading is important to understanding the operation of the futures markets.

Each futures exchange has its own clearing house. All members of an exchange are required to clear their trades through the clearing house at the end of each trading session, and to deposit with the clearing house a sum of money (based on clearinghouse margin requirements) sufficient to cover the member's debit balance. For example, if a member broker reports to the clearing house at the end of the day total purchases of 100,000 Kgs of May wheat and total sales of 50,000 kgs of May wheat (which may be for himself, his customers, or both), he would be net long 50,000 kgs of May wheat. Assuming that this is the broker's only position in futures and that the clearing house margin is Rs0.20 per kg, this would mean that the broker would be required to have Rs10,000 on deposit with the clearing house.

Because all members are required to clear their trades through the clearing house and must maintain sufficient funds with it to cover their debit balances, the clearing house is placed in a position of being responsible to all members for the fulfillment of contracts. Therefore, instead of broker A who, for example, bought 50,000 Kgs of May wheat from broker B being responsible to broker B

for fulfillment of his end of the contract, the clearing house assumes the responsibility. In like manner, the responsibility of broker B to broker A in connection with this transaction is passed on to the clearing house, with neither A or B having any further obligation to one another. The clearinghouse becomes the “other party” for all futures trades between exchange members. This mechanism greatly simplifies futures trading. Considering the huge volume of individual transactions that are made, it would be virtually impossible to do business if each party to a trade were obligated to settle directly with each other in completing their transactions.

## Margin Requirements

When one establishes a position in a commodity futures, either long or short, it is necessary to deposit with the broker a sufficient amount of money to protect the position – actually to protect the broker against loss in the event the trade entered into is unprofitable. This deposit is referred to as the margin. This amount serves as the good faith deposit by the trader. It should not be confused with the clearinghouse margin required of an exchange member. The margin required of a customer by a broker is a different margin than that required of the broker by the clearinghouse. Both margins serve the same purpose, however – they insure that obligations arising from commitments in commodity futures are fulfilled. There is no interest charged on the difference between the market value of a futures contract and the margin deposited to trade in it.

The amount of margin that one is required to deposit with the broker in order to trade in commodities is generally 10 percent or less of the market price of the commodity. Exchange regulations prescribe the minimum margins that brokers require of customers. These minimums are changed from time to time, depending on market conditions. Also, it should be noted that at any given time one broker might require larger margins than another. The broker is limited only with respect to minimum requirements. If he feels that adequate protection requires a larger margin than the minimum required by the exchange regulations, he is free to ask for a larger margin. In this connection, however, for competitive reasons a broker is somewhat limited in the amount of margin required from his customers. Consequently, the tendency is for margin requirements among various brokers to stay pretty close in line. After making an original margin



deposit with a broker, one is obligated to add this deposit only if (1) he increases the size of his market commitment, or (2) there is a loss in his existing position due to prices moving in a direction contrary to that which he had expected. The usual procedure is for the broker to call for additional margin when the original margin has been reduced (by an adverse price move, usually calculated as of the close of the market session) to roughly 70 to 75 percent of the margin originally deposited, which is called maintenance margin. The margin call is normally for the amount needed to bring one's margin back up to the original requirement.

Assume that a trader has sold 5,000 Kgs of May wheat short at Rs40 per kg, and that the broker has required Rs20,000 margin deposit on the transaction. Further assume maintenance margin is Rs15,000. One sells short, naturally, because he expects prices to decline. But suppose prices go up instead. Each one rupee move in the price of wheat is equal to Rs5,000 on a 5,000 Kg contract. This means that in the event of Rs3 increase in per kg, one would have a loss of Rs15,000 in his short position. The margin balance would be reduced to Rs5,000 and the broker would probably at this point call for an additional Rs15,000 to bring the margin back up to the original requirement. A point that should be made clear in connection with this example is that unless one closes out his short position on this three-rupee adverse, the Rs15,000 loss is a paper loss only – one that will be increased or reduced depending on subsequent market action. Now there will be Rs20,000 with the broker, the original margin deposit, plus the Rs15,000 that was deposited later. Let us suppose that after selling May wheat short at Rs40, prices decline by Rs2. In such an event one would have Rs 10,000 profit on the short sale. The broker would automatically credit this profit to the account, and with the Rs20,000 initially deposited one would have a total credit of Rs30,000. Fund in excess of original margin is of course subject to withdrawal upon request.

#### Size of the Commodity Market

The global volume of commodities contracts traded on exchanges increased by a fifth in 2010, and a half since 2008, to around 2.5 billion million contracts. During

the three years up to the end of 2010, global physical exports of commodities fell by 2%, while the outstanding value of OTC commodities derivatives declined by two-thirds as investors reduced risk following a five-fold increase in value outstanding in the previous three years. Trading on exchanges in China and India has gained importance in recent years due to their emergence as significant commodities consumers and producers. China accounted for more than 60% of exchange-traded commodities in 2009, up on its 40% share in the previous year.

Commodity assets under management more than doubled between 2008 and 2010 to nearly \$380bn. Inflows into the sector totaled over \$60bn in 2010, the second highest year on record, down from the record \$72bn allocated to commodities funds in the previous year. The bulk of funds went into precious metals and energy products. The growth in prices of many commodities in 2010 contributed to the increase in the value of commodities funds under management.

#### What Commodity Markets do?

A well-developed and effective commodity futures market, unlike physical market, facilitates offsetting the transactions without impacting on physical goods until the expiry of a contract. Futures market attracts hedgers who minimize their risks, and encourages competition from other

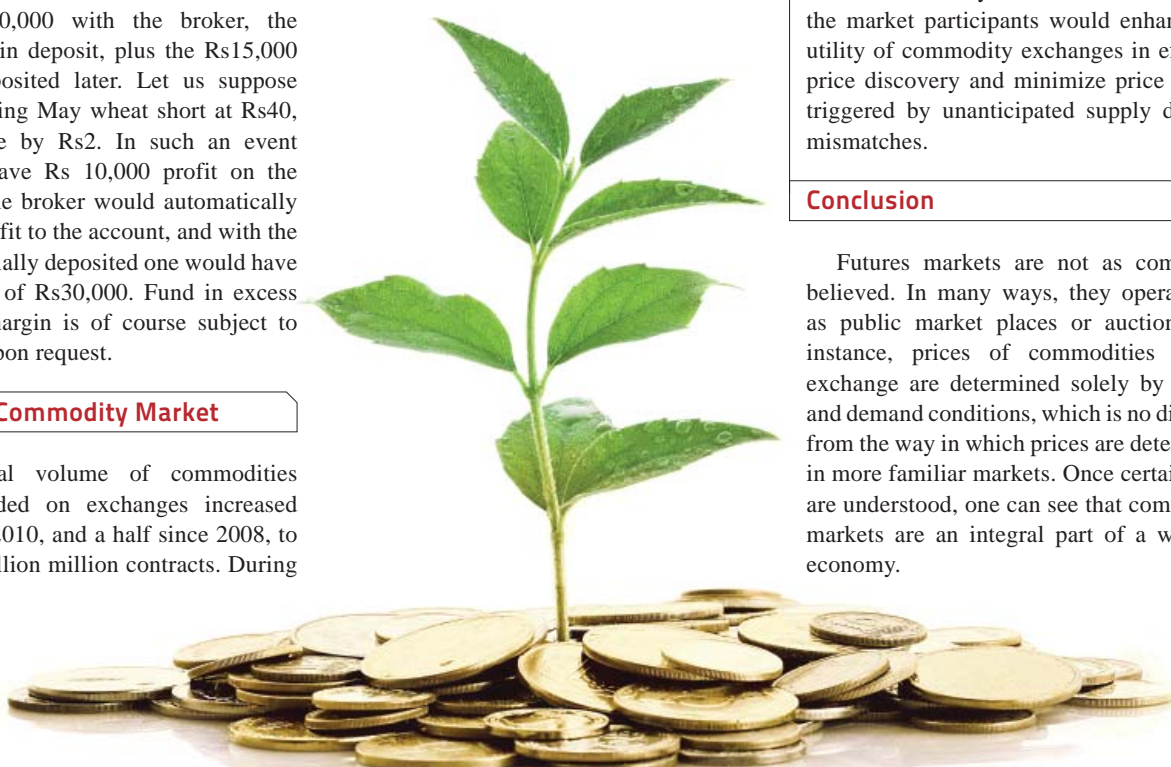
traders who possess market information and price judgment. While hedgers have long-term perspective of the market, the traders, or arbitrageurs as they are often called, hold an immediate view of the market. A large number of different market players participate in buying and selling activities in the market based on diverse domestic and global information, such as price, demand and supply, climatic conditions and other market related information. All these factors put together result in efficient price discovery as a result of large number of buyers and sellers transacting in the futures market.

Futures market, as observed from the cross-country experience of active commodity futures markets, helps in efficient price discovery of the respective commodities and does not impair the long-run equilibrium price of commodities. At times, however, price behavior of a commodity in the futures market might show some aberrations reacting to the element of speculation and 'bandwagon effect' inherent in any market, but it quickly reverts to long-run equilibrium price, as information flows in, reflecting fundamentals of the respective commodity. In futures market, speculators play a role in providing liquidity to the markets and may sometimes benefit from price movements, but do not have a systematic causal influence on prices.

An effective architecture for regulation of trading and for ensuring transparency as well as timely flow of information to the market participants would enhance the utility of commodity exchanges in efficient price discovery and minimize price shocks triggered by unanticipated supply demand mismatches.

#### Conclusion

Futures markets are not as commonly believed. In many ways, they operate just as public market places or auctions. For instance, prices of commodities on an exchange are determined solely by supply and demand conditions, which is no different from the way in which prices are determined in more familiar markets. Once certain facts are understood, one can see that commodity markets are an integral part of a well-run economy.







### **Keshav P. Acharya**

The author is a retired Executive Director of Economic Research Department of Nepal Rastra Bank. . He has also served as Senior Economic Advisor in the Ministry of Finance of the Government of Nepal, first in 1994-95, and then again in 2009-2011. Between 2006-08, he also worked as senior advisor at the Executive Board of the International Monetary Fund Headquarters in Washington, DC. Mr. Acharya has written books and articles on development issues, international trade, exchange rate and other economic issues. He holds Master in Economics from T.U. (1976) and University of the Phillipines (1990). In addition Mr. Acharya holds M.Sc in Finance from the University of Strathclyde, Glasgow (U. K.)

## Experts View

In the last decade 2001/02-2010/11, Nepali economy grew at a snail's pace. Both the major sectors of the economy, the agriculture and the non-agriculture recorded disappointing performance. The agriculture sector consistently under performed. Throughout the decade, the impulses to growth came largely from the non-agricultural sectors. There is desperation, frustration, and pessimism among all the economic actors whether from the private sector, the public sector or commentators on the national economy that the Nepali economy cannot take off. And the blame game against each other is getting pervasively acrimonious with each passing day. This paper attempts to examine whether Nepali economy is doomed to perpetual law equilibrium trap or there are some silver linings that give scope to optimism. In this process, the paper examines the historical trend of growth rate. While doing so it also attempts to examine the sources that contribute to growth rate.

Nepal started compiling, processing and publishing national accounts statistics only since fiscal year 1964/65. The national account series beginning from 1964/65 was very crude. It was improved and made internationally comparable with the series beginning from 1974/75 as the base year. An effort is made here to segregate the economic performance into high growth (in excess of five percent) and low growth (below two percent) years. After identifying

the high growth and low growth years, the paper attempts to evaluate which component contributed more to the growth. In this process, the paper also evaluates the structural evolution of the economy in terms of agricultural and non-agricultural sector's relative share in the national economy. At the same time, attempts will be made to identify the factors that contributed to growth rate, principally through gross fixed capital formation segregated into private and public sectors, price developments proxied by GDP deflators, consumption and international trade gap. But, there is a caveat to time series comparison. Since almost every decade there is a base year change, straight linear inter temporal comparison turns out to be problematic particularly with respect to GDP deflator and aggregate consumption. For instance, until 1999/2000 aggregate consumption is split between public and private, whereas with the new series beginning from 2000/01, it is split between public, private and not for profit entities. For comparison purpose, this paper lumps consumption by not for profit entities into the public consumption.

### Trend of Growth Rate

While comparing the trend and pattern of growth rate between a period of 36 years (1975/76 – 2010/11), it is apparent that late 1970s mark the sluggish period, early 1980, normally represent high growth years with slightly falling in the 1990s. With the exception of 2007/08, the new millennium



represents an intermediate performance, higher than those of 1970s and lower than the average of the 1990s.

### High Growth Years

The Nepali economy grew at the historically highest rate of 8.9 % in 1980/81, followed by 8.8 % (1983/84), 7.9 % (1993/94) and 7.1 % (1987/88). What is striking is the fact that, a high growth rate is accompanied by robust performance in both the sectors. Until the 1980s agriculture played deciding role, then after non-agricultural sectors have been playing critical role in the overall performance of the national economy. For instance:

**Table 1: Sectoral Growth Rate, GDP share and Deflators (In %)  
High Growth Years (A)**

Fiscal Year	Growth Rate			GDP Share		Deflator		
	GDP	Agriculture	Non-Agriculture	Agriculture	Non-Agriculture	GDP	Agriculture	Non-Agriculture
1980/81	8.9	10.4	7.4	51.7	48.2	7.4	3.9	11.9
1983/84	8.8	9.5	8.0	50.8	49.2	6.4	7.8	4.4
1984/85	6.9	2.4	11.5	48.7	51.3	5.6	N/A	N/A
1987/88	7.1	6.6	7.5	45.2	54.8	11.8	12.6	11.0
1990/91	6.7	2.6	10.6	45.0	55.0	9.2	7.4	19.6
1993/94	7.9	7.6	8.1	40.6	59.4	7.5	7.4	11.5
1995/96	5.7	3.8	7.0	38.6	61.4	7.5	7.0	7.8
1999/00	6.1	4.9	6.8	36.4	63.6	4.6	4.6	4.7
2007/08	5.8	5.8	5.9	35.6	64.6	16.1	21.4	13.0
<b>Low Growth Years (B)</b>								
1976/77	1.7	-4.1	9.7	54.8	45.2	-2.3	-6.8	6.8
1978/79	1.6	3.0	0.1	53.8	46.2	10.8	11.6	8.9
1979/80	0.3	-4.8	6.3	51.1	48.9	4.7	6.2	4.6
1982/83	1.1	-1.1	3.4	50.5	49.5	7.6	8.9	17.5
2001/2002	0.2	3.1	-1.1	36.9	63.1	3.9	3.6	4.8

Source: Economic Surveys of various years, MOF, GON

The non-agricultural sector grew at the highest rate of 11.5 percent in 1984/85, yet GDP grew by a modest 6.9 %, because that year agriculture had grown by the lowest rate of 2.4%. But as non-agriculture sectors begin to predominate the composition of GDP, agriculture plays relatively lesser role in growth rate as exemplified by the growth performance in 1990/91. That year, non-agricultural sectors contributed 55 percent to GDP. Hence, despite a poor performance of 2.6 percent in agriculture, GDP grew by 6.7 percent, which was pushed up by a respectable growth of 10.6 percent in non-agriculture GDP. Let us also evaluate whether the higher growth rates of seven to nine percent was achieved against the base of a very poor growth in the preceding year. The highest ever growth rate of 8.9 percent in 1980/81 had followed the poorest growth of 0.3 percent in 1979/80. Another high growth of 8.8 percent in 1983/84 was achieved against a backdrop of 1.1 percent in 1982/83. Nevertheless, growth rate in excess of 8 percent is really remarkable. In 1984/85, the growth rate of 6.9 percent followed a very high growth of 8.8 percent in the preceding year, thank to the excellent performance by non agriculture. Thus, the higher growth was not merely an outcome of poor year earlier, the economy was really getting resilient and poised for better performance.

In the eight years in which sectoral deflators are available, the deflator (a proxy for the rate of inflation) of agriculture exceeds that of non- agriculture only thrice: in 1983/84 (7.8% for agriculture viz. a viz. 4.4 percent for non agriculture), 1987/88 (12.6 percent viz. a viz. 11 percent), and 2007/08 (21.4 percent viz. a viz. 13 percent for non agriculture). In the remaining five years, the price inflation of non agricultural sectors outpaces that of agriculture sector



by a very wide magnitude. This discourages private investment in the agricultural sector, as it turns less profitable than investing in non agricultural sectors. Moreover, the Nepali economy over the years is increasingly getting service oriented. Most of the services are non-tradable. Adverse terms of trade for tradable adversely impacts upon the country's competitiveness. That is the reason Nepali peasantry finds it cheaper to consume imported food than to produce in their farms. This is telling on our BOP.

#### Low growth years

Late 1970s and few years in the early 1980s have been disappointing years for the Nepali economy as reflected by very poor growth rates, due primarily to abysmally poor performance of agriculture. The growth rate then was as low as 0.3 percent (1979/80); a small fraction of the population growth, which was well in excess of two percent. Of the five observations, agriculture had absolutely declined in three of them. Even when it grew, it never exceeded the vicinity

of a poor three percent. Non-agriculture growth rate too remained erratic, ranging from the lowest of 0.1 percent (1978/79) to the highest of 9.7 percent (1976/77).

#### Other Factors Affecting Growth

In what follows, the paper endeavors to explore what major economic factors could have contributed to growth performance. The major factors taken into consideration here are Gross Fixed Capital Formation (GFCF) split into private and public, gross savings (domestic and national ; GDS and GNS) trade gap and aggregate consumption segregated into private and public. However, this is not an exhaustive listing of factors that contribute to growth. Other factors could be legal reforms, simplification of procedures, quality, size, and composition of national budget, availability and quality of physical and social infrastructure and real exchange rate, to name a few. However, a short paper like this cannot take all these factors into consideration. The author leaves further analysis to the attention of other researches.

**Table 2: Factors Affecting Growth Rate (In %)**  
High Growth Years

Factors	1981	1984	1985	1988	1991	1994	1996	2000	2008
1. Growth Rate	8.9	8.8	6.9	7.1	6.7	7.9	5.7	6.1	5.8
2. Consumption	89.1	90.1	86.6	88.6	90.4	85.3	86.2	54.8	90.6
2.1 Private	82.1	80.9	77.2	78.6	81.2	77.3	76.9	75.9	78.2
2.2 Public	7.0	9.2	9.4	10.0	9.2	12.0	9.3	8.9	12.4
3. Gross Fixed Capital Formation	15.7	17.5	20.1	18.4	18.9	21.1	22.5	19.3	21.4
3.1 Private	9.1	9.6	12.4	9.5	11.7	14.4	15.4	12.4	16.9
3.2 Public	6.6	7.9	7.7	8.9	7.7	6.7	7.1	6.9	4.5
4. Gross Domestic Savings	10.9	9.9	13.4	11.4	9.6	14.7	13.8	15.2	9.4
5. Gross National Savings	16.5	15.3	15.0	13.2	11.5	16.9	15.8	18.6	33.2
6. Trade Deficit	6.7	8.8	8.5	8.6	11.3	7.7	12.8	9.1	22.2



Low Growth Years (B)					
Factors	1977	1979	1980	1983	2002
1. Growth Rate	1.7	1.6	0.3	1.1	0.2
2. Consumption	86.5	88.6	88.9	91.4	91.4
2.1 Private	79.2	80.1	82.2	81.3	81.4
2.2 Public	7.3	6.5	6.7	10.1	7.0
3. Gross Fixed Capital Formation	14.9	14.7	15.8	19.5	18.3
3.1 Private	10.9	9.6	9.5	10.8	14.7
3.2 Public	4.0	5.1	6.3	8.7	3.6
4. Gross Domestic Savings	13.5	11.7	11.1	8.6	9.5
5. Gross National Savings	17.5	16.0	16.8	14.7	24.2
6. Trade Deficit	2.5	9.3	7.2	11.1	9.8

Note: 2 though 6: In percent of GDP | Source: Economic Survey of various years

It is normally expected that a higher economic growth results in a higher savings and higher investment (in this table a higher gross fixed capital formation) ratio and this further propels the growth rate resulting in a virtuous cycle. On the contrary, a lower growth results in a lower savings and thereby lower investment (in our case a lower, GFCF) ratio and ultimately in a vicious cycle. Let us look into the evidence against this backdrop.

In the upper panel (higher growth years) of the table, the highest growth rate of 8.9 percent (1980/81) is accompanied with the lower domestic savings of 10.9 percent and the lowest GFCF of 15.7 percent; whereas the lowest growth rate of 0.3 percent in 1979/80 (lower panel in the table) is accompanied by a higher domestic savings of 11.1 percent and a GFCF ratio of 15.8 percent. One explanation could be whether low domestic savings is or is not offset or compensated by a higher national savings ratio. But again, national savings rate of 16.8 percent in the lowest growth year of 1979/80 is higher than the 16.5 percent national savings rate of the highest growth year of 1980/81.

Let us look into the behavior of growth rate, savings and GFCF rates in other years. The other higher growth rate in our observation occurred in 1983/84 (8.8 percent) and 1993/94 (7.9 percent). In 1984, domestic savings rate fell down to 9.9 percent but GFCF rate rose to 17.5 percent, largely due to sharp rise in public sector's capital formation. In 1993/94, when economy had expanded by 7.9 percent, domestic and national savings had expanded by 14.7 percent and 16.9 percent respectively. In the same year, capital formation had reached to a high of 21.1 percent due largely to a respectable increase in private capital formation.

Let us also look into the case of low growth years. In 1982/83 and 2001/02 the economy expanded by 1.1 percent and 0.2

percent respectively. In both the years, saving rates are lower at 8.6 percent and 9.5 percent, but the capital formations are relatively higher at 19.8 percent and 18.3 percent. What is striking is the fact that public sector capital formation is at the lowest of 3.6 percent in 2001/02. In the same year, private sector capital formation was much higher at 14.7 percent, yet economy almost stagnated at 0.2 percent growth rate.

Let us now look into the behavior of consumption and try to relate it with the growth rate. The lowest growth rate of 0.2 percent in 2001/02 and 0.3 percent in 1979/80 were associated with the consumption ratio of 91.4 percent and 88.9 percent. Likewise, the highest growth rates of 8.9 percent (1980/81) and 8.8 percent (1983/84) were accompanied with the consumption ratio of 89.1 percent and 90.1 percent. If we look further into high growth years, particularly since the 1990s, it is apparent that higher growth years exhibit a falling consumption and corollary increased domestic savings ratios. No clear cut relationship is evident between GFCF and growth rate in both the panels. This could probably be due to the fact that there is no contemporaneous relationship between capital formation and growth rate; as this year's capital formation contributes to output growth in the years to come. Similarly, from this observation; one cannot conclude that private capital is necessarily more productive than public capital formation. For instance, there is a big jump in private capital formation in 1984/85, yet growth rate is lower than in earlier two observations. Similarly, private capital formation rate also dropped in 1987/88 and in 1990/00, yet both the years had yielded higher growth rates than the earlier years.

Finally, let us see whether or not international trade flows impact growth rate. Apparently, international trade contributes to growth by making available raw materials, intermediate and capital goods and technology to the economic agents. Trade

also helps earn foreign currency. But if trade results in unsustainably higher import of consumption goods, it will tend to drag the economy. Looking at the table, it appears that higher growth years are associated with lower percentage of trade deficit to GDP. To be specific, all the years in excess of six percent growth (except for 1990/91) are associated with single digit of deficit ratio to GDP. A closer look at the table also reveals that generally, higher the deficit ratio, higher tends to be the consumption ratio. This warrants caution on the part of the policy makers.

## Conclusion

A very pleasing and optimistic conclusion is that Nepal has the potential to grow at a pace much faster than at present. There are evidences that in the past Nepali economy have grown by as high as 8.9 percent in the early 1980s. Since then Nepal has made appreciable progress in the sphere of transportation, communication, education and health. These achievements are yet to be translated into higher growth. Secondly, Nepal's private sector has grown much more mature than in the 1980s. What remains is their transformation into a confident and forward looking entrepreneur. Thirdly, the world is much more open than in the 1980s, both in our close vicinity and further away. Added to it is the tremendous global goodwill to Nepal. These pluses remain to be harnessed.

A discernible trend of the Nepali economy is that beginning from the later part of early 1980s, the value of non-agriculture output began to exceed the value of agricultural output. But, beginning from mid 1990's, the agricultural sector has been left to fend for itself, when Indian and the governments all over the world started pouring in additional investment in the development of this sector. At the same time agriculture suffered from unfavorable terms of trade both within the country and also with the rest of the world. Fairly recently, a serious introspection is creeping up.

Another conclusion drawn is, normally, a higher rate of growth is accompanied with a falling consumption and trade deficit ratios measured as a percent of GDP. Furthermore, the observation presented here does not necessarily show a definite evidence of private sector capital formation being more productive and efficient than public sector capital formation in contributing to growth rate.

# COMMODITY MARKET: A GROWING PORTFOLIO DEPENDENCE



**Manish Bikram Shah**

Mr. Shah is currently a reporter/ writer at the Boss magazine. He has completed his BBA from Kathford International College of Engineering & Management affiliated to Tribhuvan University. He has had three years of wide experience in business journalism. He brings in knowledge and is interested in Economics, Marketing, Entrepreneurship and Investment.

With the rise of remittance and the rapid movement of people to middle class strata, Nepal witnessed a sharp rise in the investment in share market and commodity market couple of years back. Although the get rich quick people from real estate sector did pour in lots of money into these markets and made them grow, the lesson to be learnt for the investors after the current record low performance of stock market and quite less by the commodity market is that investment is not gambling. People invested in lots of their money without doing prior research and their investment decisions were basically made by manipulative stock brokers with vested interest.

Generally, stock market has always been the first choice of investment among the people. Commodity market however is quite new to the Nepali market. It officially entered the Nepali market in the year 2006. However, in these past years, the number of brokers has grown five-fold and investors 60-fold; yet the size of investment has not witnessed

a similar growth rate—the growth is merely divided into many shares of the same pie entering the market. There was a big boom in the initial period as many investors rushed in enamoured by the glamour of testing the new market, but most of them did not elect to return to it as they found no substantial returns on their investments.

However, it is not that the sector is not lucrative. Globally, commodity assets under management more than doubled between 2008 and 2010 to nearly \$380 billion. Inflows into the sector totalled over \$60 billion in 2010, the second highest year on record, down from the record \$72 billion allocated to commodities funds in the previous year. The bulk of funds went into precious metals and energy products. The growth in prices of many commodities in 2010 contributed to the increase in the value of commodities funds under management. It is just the fact that in Nepal people who chose to invest in commodity market did not know properly what they were investing into and how it

would yield those results. They were less informed and did not know the mechanism of trade. Correspondingly, the lack of basic infrastructure, human resource and the lack of adequate market survey, growth analysis, and policies to fit the business atmosphere by the brokers themselves also catapulted the problem. Similarly, there has been the issue of regulations as well. Till now, the compliances that the government has laid out in the committee and the rules and bylaws that it has formulated show that the Securities Board of Nepal (SEBON) is the most feasible and practical body to regulate the derivative market (DM). However, no conclusive results have been drawn yet to who will regulate the commodity market.



## Experts View

Hence to regulate the market and to grow it as a professional investment sector, not only brokers need to have knowledge about global commodity market and its future, investors themselves need to understand that investing in commodity market is not as same as that to investing in share market.

### Time

- One of the main differences between shares of stock and commodities futures is the length of time that these assets spend on an exchange. Many stocks stay on exchanges for decades, as the companies for which they are issued continue to do business. A futures contract, by contrast, is an agreement for a producer to deliver a commodity to a supplier on a certain date. Shortly before that date arrives, the contract is removed from the exchange. Basically, the commodities traded in Nepal are gold, silver, oil and cotton.

### Risks



- The relative risk of investing in the stock market or the commodities market differ depending on the assets purchased. On the stock market, many blue chip companies have been able to demonstrate slow, steady growth over a long time period, making them relatively conservative. Many newer companies are unproven, but have the potential for a bigger upside. Similarly, some commodities, such as wheat, have historically kept a stable price. Others, such as oil, can enter periods of volatility.

### Benefits



- Each market has its own advantages for investors. Many stocks, for example, issue a quarterly dividend, which is a payment that reflects the company's quarterly earnings. Commodities can be beneficial to investors because their value is based on a physical asset. Investors will often

purchase commodities in times of economic uncertainty.

Besides that, there is other thing investors need to know before investing. Successful investment has very little to do with good luck. There are tried and tested principles investors can follow which can vastly improve investors ability to achieve their goals and avoid disaster. It is for their own sake that investors need to do proper homework as to which effective broker to

choose and how brokers can add value to investment

There are no short-cuts to becoming a successful investor. Investors need to understand the basic principles. It's pretty easy to understand that people invest because they want to increase their personal freedom, sense of security and ability to afford the things they want in life. Blind investing isn't a get-rich-quick scheme.







# POSSIBILITY OF INDEX FUTURES IN NEPAL



## Niranjana Phuyal

The writer is a Senior Officer at Nepal Stock Exchange (NEPSE). He did his MBS from Tribhuvan University and is currently doing his MPhil. He has been working in NEPSE for the last 4 years and was previously associated with Life Insurance Corporation (Nepal) Ltd. Mr. Phuyal is also a visiting faculty of Kathmandu University School of Management (KUSOM).

### Background

Securities are means of investment which help to mobilize savings to form capital. After the establishment of Nepal Stock Exchange (NEPSE), securities like equity shares, preference shares and bonds started to trade at an organized exchange since February 1994. Although we were started with various sector companies like production, trading, services, banking industries etc, later on the capital market mostly concentrated on banking industry. More than 80% of listed companies at NEPSE are from banking industry and about 75% of trading volume is contributed by the same industry (NEPSE, 2011). Moreover, we are not diversified on various scrips also. More than the initial scrips like equity shares, preference shares and bonds, only government bonds and

convertible preference shares have been added in the market. Although few activities of commodities derivatives trading have started recently, it is not regulated till now. Still, Nepalese capital market lacks mutual funds, large investment companies, index funds and other derivative and futures scrips. However, during the last two decades, the investment instruments available to worldwide investors have drastically changed. Investment mediums like financial derivatives, commodities derivatives, exchange traded funds, index funds, futures, swaps etc have added a wide range of alternatives for investors and this situation has provided investors with an opportunity to create well diversified portfolio and hedging possibility to minimize risk. But Nepalese investors are unable to enjoy such benefits due

to the lack of well diversified investment alternatives as well as huge concentration on banking sector.

### Index Futures

Derivatives are the contract which will create liabilities in the future at specified time and their prices are directed by the price of underlying assets. There are various forms of derivatives and many of them can be traded on organized exchanges. A stock index future is an exchange traded contract that is used for both hedging and speculation purpose. Index future is such derivative where the underlying commodity is a stock index, such as the Dow Jones, or the FTSE100. Stock indexes cannot be traded directly, so futures based upon stock indexes are the primary way of trading stock

## Experts View

indexes. The price of each unit of index is set fixed. For example, \$50 is fixed for per point of index for the future contract on S&P 500 index (Chicago Mercantile Exchange, 2002). It is similar like option but the holder of the option is not compelled to buy or sell the underlying securities at the maturity date, however the future contract carries the obligation to go through the agreed-upon transaction.

Although, the future securities were rooted on agricultural products, today's advance future market is focused on financial futures such as stock index futures (Montreal Exchange, 2007). For the stock index futures, the underlying asset is the stock index such as S&P 500 or any other index. So, delivery of every stock in the index would be impractical. That's why, in contrast to most future contracts, which all call for delivery of specified commodity or assets, stock index contracts are settled by a cash amount equal to the value of the stock index on the contract maturity date.

### Why it is needed?

Basically, index futures are utilized for risk hedging purpose or for wealth appreciation. Investors who want to get benefit from the increase in index points will buy the index future and will be benefited from the increase in index points. Hedgers use futures contracts to fix a price for an anticipated purchase or sale. Those exposed to risk of prices going higher will buy futures or enter into long positions and those exposed to the risk of prices going lower will sell futures or enter into short positions.

### Hedging Risk in Nepalese Context

The traders of equity shares as well as others who are interested in economy are interested on the movement of stock market indices. Investors' interest in stock market indices largely results from the increasing popularity of the "index" portfolio management style, which consists of

building portfolios that mirror stock market indices. Although, exchange traded index funds are not available in Nepal, the recent regulation on Mutual Funds has opened door to establish such funds. Moreover, there are few organizations which are managing portfolios for investors and some of them are providing guaranteed return for the investors. This could be risky in the decreasing market especially for those who are holding portfolios with index fund or for mutual funds and investment companies who are holding portfolio whose performance is highly correlated with index movement.

For example, suppose a portfolio manager manages Rs. 500 million portfolio with portfolio risk beta of 1.2. Suppose again that the market is bullish for the long time, but the portfolio manager predicts the possibility that over the next 5 months, there would be a sharp downturn. If the index or market goes down by 25%, then the worth of the portfolio will be down by  $1.2 \times 25\%$  which equals to 30%. This is a situation of extreme risk for a portfolio manager. If there is no mediating cost, then the easy way would be to sell the portfolio today and reinstate the same after 5 months. But due to the mediating and other costs, investing in stock index futures will hedge such risk. To hedge this risk, the portfolio manager can sell stock index future and take the short position. When the portfolio value falls along with decline in the broad market, the futures contract will provide an offsetting profit and if the index value increases the increased worth of the portfolio will compensate the loss on index future. If the portfolio is constructed by investing in the same stocks with equal weights as they are in index basket, then the risk can be exactly offset.

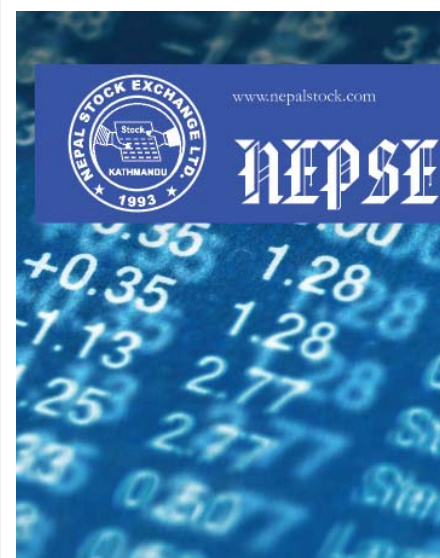
### Conclusion

Although we have very limited investment scrips and investors have less financial literacy, there is huge potentiality in Nepalese capital market. The recent

Mutual Fund Regulation, 2011, has provided opportunity to form investment companies, mutual funds and index funds. Some companies are currently working to perform such activities. Moreover, the regulation has also defined the possible avenues of investment through such funds which could create a well diversified portfolio. So, this could be a right time to start the index futures in Nepal so that when the portfolio managers will be managing their portfolios in Nepalese capital market, there should be an index future to provide opportunity to hedge risk.

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### Some Popular Stock Index Futures:

Name of future contract	Underlying Market Index	Traded Exchange
YM Futures Market	Dow Jones stock index	Chicago Board of Trade
ES- S & P 500	Standard & Poor's 500 index	Chicago Mercantile Exchange
FTSE 100	Financial Times Stock Exchange of 100 UK firms	London International Financial Futures Exchange
DAX - The DAX index future of the DTB (Deutsche Boerse)	DAX stock index of 30 companies of Germany	Eurex
HSI futures	Hang Seng stock index of 38 companies	Hong Kong Futures Exchange

Source: "Investment" by Bodie, Kane, Marcus & Mohanty, 2009

# FINANCIAL CRISIS



**Piyush Raj Aryal**

Mr. Aryal is the Head of Finance and Treasury at Laxmi Bank and has been associated with the bank for the past eight years. He holds an MBA degree from Kathmandu University School of Management. He is a faculty member at Ace Institute of Management, Pokhara University where he teaches International Finance, Financial Institution and Markets, Investment Decisions and Commercial Bank Management.

There was The Great Depression in the 1930's, Asian Crisis in the 1990's and Global Financial Crisis since 2008 and recently each news channel in the TV, economic reports in the papers and Internet sites are covering the crisis seen in the Eurozone. Though heard over and over several times from the different sources of information flooding us each minute, the literal meaning of the term 'Financial Crisis' is still vague for many. The term financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a large part of their value. Since the past centuries till the recent times, many financial crises have been associated with banking panics. Other situations that are often termed as financial crises include stock market crashes and the bursting of other financial bubbles

(like real estate, commodity), currency crisis, and sovereign defaults. Many economic recessions observed in the past have coincided with banking panics and other crisis.

There have been different views on how a financial crisis can develop, how these can be prevented and what are the steps that can be taken to come out of a recessionary or a depression situation? Economists have offered various theories in this regard. There is little consensus, however, and financial crises are still a regular occurrence around the world.

A major type of a Financial Crisis includes Bank Runs that is caused primarily due to liquidity shortage situations when a large number of its depositors want to withdraw

their funds from a bank. Since banks in their normal course of business keep only part of their deposits as liquid funds, they may not be able to handle a sudden demand for large deposit withdrawals. When a bank run is widespread in the banking industry, it is termed as a systemic crisis or a banking panic. There could also be situations where a bank run or systemic crisis may not happen but banks simply stop or reduce their lending activities in fear of a liquidity crisis. This situation is termed as a credit crunch. Such situations could ultimately lead to a financial crisis. Speculative bubbles and crashes could also result in a financial crisis. Economists have defined bubble as a situation where price of an asset exceeds the present value of future income flows from owning the asset (financial / real asset like stock, real estate can be an example) till its maturity. If



## Experts View

investors buy assets just in hope of selling it later at a higher price (speculative purposes) without consideration of the income it generates over its holding period, a bubble is likely to be created. A bubble in due course of time can result in a price crash for the asset. Other types of crisis include Currency crisis and Sovereign default. When a country's currency is suddenly devaluated, this is called a currency crisis. This could be followed by hyperinflation in the economy. When a country fails to pay back its sovereign debt, this is called a sovereign default.

Some economists argue that many recessions have been caused by financial crises. One important example is the Great Depression, which was preceded in many countries by bank runs and stock market crashes. The subprime mortgage crisis and the bursting of other real estate bubbles around the world also led to recession in the U.S. and a number of other countries in late 2008 and 2009. Moreover, some others argue that financial crises are caused by recessions instead of the other way around, and that even where a financial crisis is the initial shock that sets off a recession, other factors may be more important in prolonging the recession.

**The major causes of financial crisis have been identified as:**



### 1. Leverage

Heavy borrowing to finance investments can lead to financial crises. Leverage magnifies the potential returns from the investment but not being able to pay back the debts can worsen situation beyond control leading to a crisis. Lessons from past financial crisis around the globe show that leverage levels in economies normally rise before a crisis. Excessive margin borrowing is sighted as one of the reasons for Wall Street Crash of 1929. Real estate price bubbles have been created due to easy availability of bank financing.



### 2. Asset-liability mismatch

Financial crises could be caused due to mismatch in asset and liability in terms of tenure, type and mix. Financing long terms assets / investments with short-term liability (short term deposit in case of banks) can cause a problem if the liability are not renewed at its maturity or level of liability has to be reduced. Currency mismatch could also lead to default (sovereign default in international context) when the currency of income inflow and currency of the liability differ. If income is in local currency and debt in a foreign currency, movement in exchange rates could hamper the repayment capacity.

### 3. Herd behavior

Economists studying financial crises have often emphasized the role of investment mistakes caused by lack of knowledge to a financial crisis. Due to unfamiliarity with recent technical and financial innovations, investors sometimes overvalue assets and when this spirals up the price levels, a crash may become inevitable.

### 4. Strategic complementarities

It is often observed that successful investment requires correct guessing of actions by other investors. For example, investors who think other investors want to buy lot of Gold may expect the Gold price to rise, and therefore have an incentive to buy gold too. High demand for Gold with lot of investors estimating movement of gold price in upward direction will move the actual asset price up. Likewise, if many depositors expect a bank to fail this may cause the bank to actually fail caused by liquidity problems even if other fundamentals of the bank remain sound.

### 5. Regulation

Governments have used regulation as a major tool for controlling situations that could lead to a financial crisis. One of the goals of regulation is raising the bar for transparency standards through reporting and disclosure requirements such that the investors remain well informed. In case of financial institutions, governments also try to ensure that banks are adequately capitalized to take on any major risk.

Insufficient regulation has been blamed as a cause for some financial crises that have occurred in the past and efforts have been made to correct the situation. However, excessive regulation could also lead to inefficiency in the financial system leading to a crisis situation.

### 6. Fraud



Ponzi schemes and fraud have played a role in the collapse of some financial institutions, when companies have attracted depositors with misleading claims about their investment strategies, or have embezzled the resulting income. Fraud in mortgage financing has been cited as one possible cause of the 2008 subprime mortgage crisis in the US.

### 7. Contagion

Contagion refers to the concept of a crisis spreading from one institution to another, one industry to the other and also from one country to the other. Banking panic, currency crises, sovereign defaults, or stock market crashes could spread across countries. The sub-prime crisis that started in the US ultimately had a global impact with many large economies entering into a recessionary situation.

### History of Financial Crisis

Economists have traced the history of financial crisis back to sovereign defaults (default on public debt) – which were the form of crisis prior to the 18th century and continue. There are many other financial crisis reported since the 17th century.

From bursting of Tulip mania in the Netherlands in 1637 to the recent Sovereign debt problems in Europe, financial crisis



have had its effects in the national and global economies.

The 20th Century started with crashing of the New York Stock Exchange in 1901. The major crisis for the century is recalled as the Wall Street Crash of 1929, followed by the Great Depression – the largest and most important economic depression in the 20th century. Other crisis in the century includes the 1973 oil crisis when oil prices soared, causing the 1973–1974 stock market crash, Latin American debt crisis in the 1980's, Black Monday in 1987 – the largest one-day percentage decline in stock market history, 1990 Japanese asset price bubble collapse, 1992–93 Black Wednesday – speculative attacks on currencies in the European Exchange Rate Mechanism, 1997 Asian Financial Crisis – devaluations and banking crises across Asia and 1998 Russian financial crisis.

21st century has been marked with Argentine Crises in 2001 and bursting of dot-com bubble where speculations concerning Internet companies crashed in the same year.

The major financial crisis for the century is the 2007–10 crisis, followed by worldwide economic recession and the 2010 European sovereign debt crisis with its ongoing effects do date.

The late 2000s financial crisis (often called the Global Recession, Global Financial Crisis or the Credit Crunch) is considered by many economists to be the worst financial crisis since the Great

Depression of the 1930s. It resulted in the collapse of large financial institutions, the bailout of banks by national governments, and downturns in stock markets around the world. In many areas, the housing market had also suffered. It contributed to the failure of key businesses, declines in consumer wealth estimated in the trillions of U.S. dollars, and a significant decline in economic activity, leading to a severe global economic recession in 2008.

The financial crisis was triggered by a liquidity shortfall in the United States banking system in 2008. The collapse of the U.S. housing bubble, which peaked in 2007, caused the values of securities tied to U.S. real estate pricing to plummet, damaging financial institutions globally. Questions regarding bank solvency, declines in credit availability and damaged investor confidence had an impact on global stock markets, where securities suffered large losses during 2008 and early 2009. Economies worldwide slowed during this period, as credit tightened and international trade declined.

While many causes for the financial crisis have been suggested, with varying weight assigned by experts, the United States Senate issuing the Levin–Coburn Report found “that the crisis was not a natural disaster, but the result of high risk, complex financial products; undisclosed conflicts of interest; and the failure of regulators, the credit rating agencies, and the market itself to rein in the excesses of Wall Street.”

From late 2009, fears of a sovereign debt crisis developed among investors concerning some European states, with the situation becoming particularly tense in early 2010. This included Eurozone members Greece, Ireland, Italy, Spain and Portugal and also some EU countries outside the area. In the EU, especially in countries where sovereign debts have increased sharply due to bank bailouts, a crisis of confidence has emerged. While the sovereign debt increases have been most pronounced in only a few Eurozone countries, they have become a perceived problem for the area as a whole.

