

Banking Sector  
Lucrative or Not?

Securitization in Sri  
Lanka

Review on Macro-  
Economy

Macro-Economic  
Variables and Stock  
Returns

Finance Explorer  
Magazine  
7th Edition



Department of Finance  
FMSC / USJP

# Ethics in Finance

Banking Sector  
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in  
Sri Lanka

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Macro  
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# University of Sri Jayewardenepura

*Established in 1873, as the 'Vidyodaya Pirivena', the University of Sri Jayewardenepura has been a cornerstone of Sri Lankan culture, economics and politics throughout its consequential history. A descendant of the long standing 'Piriven' education system of ancient Sri Lanka, the university soon adopted its methods to reflect the contemporary standards of tertiary education, producing many distinguished alumni who had been of great service to the nation and academia in general.*

*The university presently consists of over 12,000 students belonging to seven faculties consisting of 57 academic departments. In true reflection of its dual identity as a standard bearer for both traditional and modern education in Sri Lanka, the university motto is a phrase from the Dhammapada - Vijja uppatatan setta – meaning, “among all that is born, knowledge is the greatest” – an adage central to both ideologies.*

## Faculty of Management Studies and Commerce

*Felt with the need to provide young graduates with a better gateway to the modern entrepreneurial economy, the administration of the University of Sri Jayewardenepura established a new department for the study in the field of management and commerce, under the existing Faculty of Arts. With booming demand for commercial knowledge, it was elevated to faculty status in 1972 and has not looked back ever since.*

*Throughout the years, the Faculty of Management Studies and Commerce has built up a reputation for the quality of its curricula and its graduates. Alumni of the faculty has been front and center in Sri Lanka's rapid economic growth in the recent past, both in the government sector and in the private sector, more than justifying the foresight of the creators of the faculty.*

## The Department of Finance

The Department of Finance is one of the most prominent academic departments in the Faculty of Management Studies and Commerce, which offers the B.Sc. Finance (Special) degree programme every year to the undergraduates of the faculty since 2001. Conceptualized as part of the Faculty Restructuring Programme in the year 2001, the Department of Finance aims in “creating highly capable and disciplined individuals who can meet the challenging needs of the financial and capital markets of Sri Lanka”.

With the advent of a fast growing economy and subsequently expanding financial markets, the country is faced with an ever increasing demand for professionals in the field of Finance to match the increasingly sophisticated levels of skills required. Our department strives hard to bridge that gap while providing a well-rounded education to the future finance professionals and academics of Sri Lanka.

### Students' Association of Finance (SAF)

*SAF is the representative student body of the students of the Department of Finance. SAF is an active and a forward looking students' association among the university community. SAF strives to achieve students' excellence by enhancing students' knowledge and skills needed in their future professional lives and providing a platform for student interaction. The association has successfully implemented a range of events and programs throughout its history.*

### Financial Explorer magazine.

*The Financial Explorer originated as a concept of the 2nd batch of department of finance. The sole objective of the magazine is to replenish the readers thirst for financial knowledge. The Magazine targets all who have an interest in the world of Finance & its developments. Being the official magazine of SAF the magazine wishes to publish all the activities carried out to the date of progress of the society in order to keep its past present & potential members updated about their beloved society.*

**To whom:** *To those who have a genuine thirst for economic, financial and business arenas.*

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### **Editorial note:**

2017 is expected to be a significant and transformative year.

*The Central Bank of Sri Lanka has issued local Basel III capital requirements that banks are expected to comply with from 1 July 2017, whilst we believe that banks are likely to be compliant on this requirement. Moreover, most importantly for the finance industry, it is predicted to be the year we celebrate a major transformation.*

*With Today's dynamic environment, traditional markets, fewer trading securities and seeking more effective, efficient, reliable and stable finance industry for financial and non-financial institutions and market participants, the era of transformation is upon us.*

*Welcome to the Financial Explorer - the magazine to replenish the readers thirst for financial knowledge. This publication touches above transformation. Inside, you will find interviews with industry personnel, research insights, Society achievements and knowledge pulse.*

*Our effort is to reveal interesting insights on the research findings, updating you on the current economic situations.*

*I hope this volume stimulates readers' thirst in economy, finance field and business world and provokes discussion around your desk. We also encourage you to start dialogue with us and share your knowledge with us to empower undergraduates and once who are nearing their*

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## CURRENT ECONOMY AND ITS IMPACT TO THE BANKING SECTOR

*Interview article with Mr. Nandika Buddhipala, CFO – Commercial Bank of Ceylon PLC*



*I started my career at KPMG after completing my first degree B.Sc. in Business Administration from University of Sri Jayewardenepura and after getting through finals of the Institute of Chartered Accountants. During my article period I worked at Colombo and Maldives KPMG offices and seconded to KPMG Peat Marwick Michael in Sultanate of Oman. After completing my articles I joined Mobitel as Financial Accountant and thereafter promoted to Finance Manager, General Manager – Finance and Administration and Chief Financial Officer. During my stay at Mobitel I completed Post Graduate Diploma in Management from University of Jayewardenepura and MBA and M A in Financial Economics from University of Colombo. Further, I completed exams and membership of Association of Chartered Certified Accountants (ACCA) and The Institute of Certified Management Accountants of Australia. During my long career at Mobitel I overlooked finance & accounting, treasury, management accounting and budgeting, procurement, credit control and service center at different times. Before joining Commercial Bank I obtained the membership of Institute of Certified Management Accountants of Sri Lanka and Sri Lanka Economic Association.*

*I joined Commercial Bank as CFO in January 2008 and thereafter I completed M.Sc. in Financial Mathematics from University of Colombo and obtained the membership of Chartered Institute for Securities and Investment (CISI) and became a Senior Associate of Financial Services Institute of Australia. I was a past president (2008/09) and current Member Network Panel of ACCA Sri Lanka branch and appointed to the Global Education Forum of ACCA. Presently I am the Deputy President of the National Chamber of Sri Lanka, External Member of the Faculty of Business Studies & Finance of Wayamba University, Member of the Board of Management of the School of Accounting & Business of CA Sri Lanka, Member of the National Advisory Committee of CISI Sri Lanka Branch, visiting lecturer for MBA in Finance – University of Colombo and a member of American Accounting Association, Royal Economic Society and Accounting & Finance Association of Australia and New Zealand.*

**Q: Before getting on to the Banking Sector, you worked with Mobitel for almost fourteen years. Can you explain the reason behind your shift to Banking industry from the Telecommunications industry?**

There's a quite difference between Telecommunication industry and the Banking industry. When we look at the service component of Sri Lankan GDP, Telecommunication also contributes a lot but in any economy, there's a close relationship between the Banking sector, Financial Intermediary and the community development or the GDP growth of a country. This is specifically important in emerging markets like Sri Lanka. The difference between emerging markets and the developed markets is that in emerging markets, until the economy get in to a certain stage of economic development, the banking sector will go in parallel or helps a lot to the economic development. When it comes to a specific stage in economic development, the stock market, FDIs and other similar instruments will come in to play. Sri Lanka is still in this transition period. As a result, the banking Sector is bit more vital than any other specific industry or sector. As an example, when we look at the lending to private sector, the banking sector needs to interact with all other sectors in the economy. And as a result, by joining the banking sector you can play a wider role and get much more exposure than restricting yourself to one particular industry of

the economy. So that was the reason for my decision for joining the banking sector.

**Q: What do you think about the current economic situation of Sri Lanka?**

Beginning from the Fiscal side of the economy, The fiscal deficit of Sri Lanka is around 5 – 6% of the GDP and the government revenue has come down to 10 – 11% of the GDP in the recent past resulting in a huge amount of fiscal stress in the economy. The other side of the macro parameters includes factors such as Debt to GDP percentage. So, our debt to GDP is running at 76% at the moment resulting in a big issue especially in the rating environment. Therefore in all most all the peer rated countries, even Mongolia is having a better debt to GDP than ours. When it comes to our situation, it's totally different to other peer countries especially due to high debt to GDP ratio. Debt servicing is another important factor to look at in our economy. Huge amount of the government revenue is spent on debt servicing where the interest component alone accounts for 30- 40 % of the government revenue which is a serious situation where medium term or an immediate fix for the situation will be difficult. Considering the GDP growth, what we expect is that it's going to be around 5 – 6% in the medium term. One reason for this is the fiscal deficit, another is the FDIs coming through are not adequate and

there is a deficit in savings of the country when compared to the investment we need. This gap should ideally be bridged by the government or the private sector but, at the moment they don't have the capacity to bridge this gap.

When we look at the sectors in the economy, about 30% of the working population in Sri Lanka is attached to the agricultural sector but, the contribution to the GDP from this particular sector is only around 8 – 9% of the GDP. Therefore, we need to re think about improving the productivity and transferring the excess capacity in this sector to the other sectors. When we look at the financial hubs of the world, first always go to London or New York, and then comes Singapore and Hong Kong. We are trying to make parallel to Singapore and Hong Kong. In these countries, there's a huge service and a financial sector and the agriculture component is very low. Our situation is very different to these countries and at the moment we are nowhere there. We are trying to work towards that particular direction. However, it will take time and we are currently in a transition period towards this goal.

The export performance of the country is very poor. The trade deficit of the country is about 10% of the GDP where our comfort factor comes from the remittances and the tourism sector. Therefore, the situation is that we are

in a transition period with a huge amount of debt burden.

**Q: Recently we saw that Sri Lanka government is going for Sri Lanka Development Bonds as a mode of raising funds. What is your opinion on this? Is it a better source of funding for Sri Lanka since it is a low cost source?**

There are two aspects for this issue. One is that the common understanding is we are coming closer to the transition to a middle income country. However, although our per capita income is going up, still we are in the process of getting into a meaningful middle income. The issue here is when we are treated as an emerging market or a less developed country, then we have a lot of concessionary lending that we can afford such as ADB and World Bank where the interest rates are much lower than the bills and bonds. So as a result, still the SLDB auctions will have a significant impact on the Debt to GDP values. The next issue is the purpose of these auctions. What we do is we are just rolling over the existing debt rather than putting that money to the development of the country. So, there is no improvement in the present situation unless GDP is improved heavily. The situation is as any other government in a situation like this, the present government is also running out of options. Therefore I don't believe that in the long run, raising

bills and bonds at competitive rates is going to be the solution.

**Q: What do you think that the governing bodies in Sri Lanka should implement in order to uplift the economy of Sri Lanka?**

As I have explained previously, if the economy is not a financial hub or any other service hub such as the Navel hub, the service sector servicing only the local community is not a sustainable model. Further, high concentration of the labour force to the Agricultural sector is also an issue we have. Looking at the global economy, import substitution is not going to be the solution since many countries have tried it in 70s and 80s and have failed. So our focus should be on export orientation through manufacturing, even from the agriculture. Since our domestic market is small, we don't have the comfort like India or China to develop the economy through agriculture even during the early stages of development of the economy. We need to find our niche markets and we need to focus on manufacturing and even services but that should be export oriented. The structure need to be changed, but it cannot be done overnight.

Another factor that we should focus is developing the technical capacity of the local population. For this, the O/L and A/L dropouts should be converted to technically sound workforce within a short period such as six months to one year. This will

help the manufacturing and service sectors and even the agricultural sector to develop with a proper export orientation. This will help us to sustain mainly in the medium term.

**Q: After looking at the economy, we have already observed that there are several unclear areas in the budget. What did you think about the 2017 budget proposals? Will the budget improve the performance of the economy and the financial sector or will it hinder the performance?**

What should ideally happen is at the beginning of every financial year on 1<sup>st</sup> of April, The budget proposals should be gazetted. But we saw that this is not happening this year and it didn't happen even in the last year. This is the main reason for the unclear situation in the economy. However, due to the collaborative nature of the existing government, lots of healthy discussions on these budget proposals are still on going. Although there are certain delays this should actually be appreciated as these are not destructive and adamant attempts to disrupt the government proposals but will be helpful in selecting most appropriate solutions and decisions. But as far as the economy, the entrepreneurs and the enterprises are concerned, this uncertainty is a problem to them.

As far as our capital markets are concerned, we can observe that the market capitalization to GDP is around 30% where in developed

countries this exceeds 200%, since number of quoted companies in Sri Lanka is low and there are quite a few banking and financial institutions also in this space. The contribution to the economy from the remaining informal sector is high and as a result of this, it is very difficult for the Inland Revenue or any other institution to go after this informal sector to collect taxes. As a country where government debt servicing expenditure is very high, what government tries to achieve at this point is to increase the tax base through direct and indirect taxes. Therefore as a result of unavailability of the published financials in the informal sector, the quoted companies and financial institutions have become most attractive sources for government to raise taxes and thus, it is one of the major reasons for increasing taxes on financial sector from the recent budgets.

The next important aspect is the indirect taxes. Especially when it comes to the VAT increase on financial sector, unlike in the other sectors this cannot be transferred to the customer. The other proposed transaction levies have the same non transferrable nature. Therefore it's going to add a considerable burden to the industry. However, the reasons behind these taxes are that the government is in a requirement of improving the government revenue in the short and medium term and they have run out of options rather than relying on indirect taxes.

**Q: In the recent past, several practices such as tax on tax and imposing taxes with retrospective effect were observed. Therefore, do you think Sri Lankan Economy follows economic fundamentals?**

When considering the emerging markets and improvement of the government revenue, some of these economic principles are not going to work. As an example, government can remove tax on taxes, however, since they need the revenue they will have to increase the tax rate. Either one of it is having the same impact.

Considering the taxes with retrospective effect, especially taxes imposed on existing corporate debentures, these instruments are supposed to trade in the secondary market and the liquidity of the instruments and the level of activity in the secondary market are very low. A practical difficulty exists in segregating these instruments whether they were issued before the budget proposals or after. This is even common to bills and bonds issued by the government since the liquidity in the secondary market is low. As a result of the retrospective taxation, issues that can arise can be related to damaging the market sentiment, market credibility and the credibility of the issuer.

**Q: Recently we experienced exiting of foreign investors from Sri Lanka**

**Bonds. What would be the reasons for them to exit?**

The known fact of FED rates being increased is one of the most significant reasons. When investors see stability in US dollars, Investors feel that they can get much more return from investing there. Further if these investors invest in Sri Lanka and if the Sri Lankan currency is going to get depreciated by 4 – 5%, investors should have a return which compensates this depreciation. Therefore if the return is not going to be high enough, the investors are going back to their safe heavens. So, this happens not only to Sri Lanka but in most of the emerging markets these days.

Another factor is that certain rules, taxes and uncertainty in the country is also a problem. Therefore, to attract FDIs we should have a stable policy framework specifically regarding property rights, settling disagreements, ease of making investments, exit mechanisms etc. However, the key reason for the exit of foreign investors these days is the increase of FED rates and the strengthening of the US Dollar.

**Q: We have seen that the Stock Market has come to a standstill in the recent periods, what is your reading on the Sri Lankan Stock market conditions and how to improve it?**

There are actually two reasons. One is the foreign investors who had invested in bills and bonds market had also invested in the stock market.

Therefore, their exit had an impact on the stock market. Most of these funds had their own issues. As a result of these issues, they had to reduce their investments in the emerging markets, liquidate the investments and move out of the markets. Secondly, the investors looking for a stable yield from the developed markets also resulted in market exiting from the emerging markets resulting in poor performance in the stock markets such as Sri Lanka. Therefore, predominantly the issue is arising from the global phenomena of funds exiting from the emerging markets where unavailability of a stable exchange rate and a policy framework in Sri Lanka too had an impact on the exiting of investors.

As I have mentioned earlier, our market capitalization to GDP is very small and which is around 30%. As a result, contribution from foreign fund managers to our market is also very small. The long-term solution is to increase the market capitalization and increase the IPOs, increase companies coming for listing. For that purpose, we need to increase awareness among people, implement a stable tax and a policy framework and most importantly, promote export outward oriented manufacturing and service provision. These are the possible solutions to improve the performance

and specifically the liquidity of the capital markets rather than just looking at one or two incident and finding someone to blame.

**Q: Currently, the financial sector is subject to many regulatory requirements. Do you think imposing rules and regulations is an effective method of improving efficiency and evaluation?**

As far as the banking sector is concerned, the regulations for the past decade have been very strong. That's why we haven't seen any volatility in the market when the banking sector is concerned. Some of the regulations on the banking sector such as regulations regarding foreign exchange might

have to be reevaluated to have some progressive impact to the banking sector. Except for that the regulations on the banking sector are very sound. But when it comes to non-banking financial institutions, the regulations are in place, but, there are too many institutions where there are around 50 institutions from which most of the institutions are into hire purchasing and leasing. So there I feel that some regulation is required to reduce the number of institutions by consolidation.

*Akila Karunarathne and Malaka Mapatuna (April 2017)  
Graduate 2011/2012*

## SECURITIZATION IN SRI LANKAN CONTEXT

Securitization can be simply defined as the process of pooling together a group of receivables from financial assets and issuing of fixed income instruments to investors based on the strength of future stream of cash flows.

The reason for corporates and investors preferring securitizations over other debt instruments lies with the special features that securitization carries in its structure which minimizes the risk for the investors and relatively lower regulations and effort in issuing these debt instruments for the issuing company.

As a result of these factors, securitization became increasingly popular mode of raising debt capital worldwide. However, practices in Sri Lanka differs to the practices in other countries in several aspects which will be discussed later in this article.

### **Eligible Cash flows For Securitization**

- Lease/Hire Purchase Rentals
- Future Tea Receivables from the Brokers
- Housing Loan Receivables

- School Fees
- Utility Payments & Rates
- Credit Card Receivables
- Building Rent Receivables
- Any other identifiable future cash flow

### **The Structure**

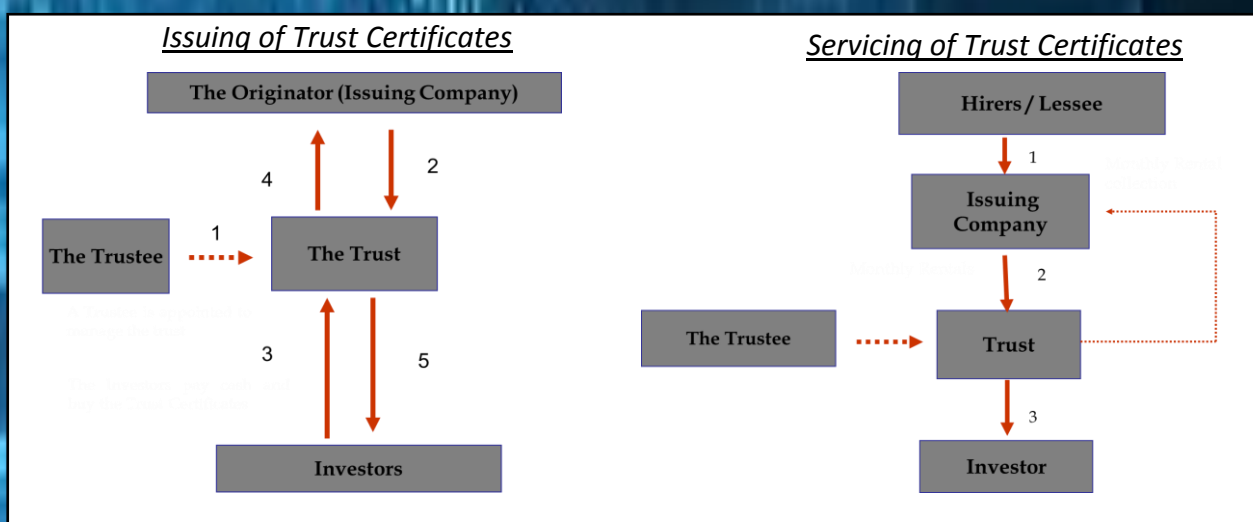
In order to minimize the risk to the investors, cash flows which are securitized to issue fixed income securities are separated from the issuing entity. This can be identified as the key feature in the securitization structure which differentiates securitization from other debt instruments such as term loans and corporate debentures. Apart from this key feature, some of the remaining features are flexible based on the investor and the borrower requirements.

In a securitization, the borrower identifies the cash flows to be securitized in issuing the debt instruments. Usually the cash flows are receivables of lease/Hire purchase agreements of finance companies. These cash flows will be isolated from

the borrower (Also referred to as the Originator) and will be assigned to a Special purpose vehicle (SPV) which is created for the purpose of issuing the debt securities. As a result, it will be the SPV which would be issuing the debt instruments (Also referred to as trust certificates) not the originator. This results in the credit worthiness

(which is evaluated by a credit rating) of the SPV becoming higher than the credit worthiness of the originator. This will result in advantages such as lower investor risk and therefore reduced cost of borrowing for the originator. This structure can be clearly understood by referring to the process of securitization.

## *The Process*



As represented in the above diagram, a securitization transaction consists of two stages, stage 1 – Issuing of trust certificates and stage 2 – Servicing the trust certificates.

The stage of Issuing trust certificates can be explained as below.

Initially, a trust is established and a trustee is appointed in order to manage the trust. The parties to the transaction (The originator, trustee and the investors) agree upon a trust deed which includes the rights, duties and other relevant terms and conditions for the transaction. The Trust acts as the SPV which issues the

trust certificates on behalf of the originator. Usually a bank acts as the trustee in Sri Lankan securitization deals. As the second stage, the originator mortgages its selected receivables to the trustee through a mortgage bond in order to be used as the security for the trust certificates. As the next step, the investors pay cash to the trust and the cash is paid to the originator by the trustee. Following the payment of cash by the investor, the trustee issues trust certificates to the investors.

When servicing the trust certificates, the hirers/lessee pay cash to the originator. As these receivable cash flows are mortgaged to the trust, the originator will then pay the cash it received from the mortgaged contracts to the trust. As trust certificates mature, the trustee uses this cash to service the trust certificates after which if any excess cash remains with the trust, this residual cash is paid back to the originator.

### **The trust Certificates**

The trust certificates issued in securitizations are debt instruments maturing each month. I.e. if the

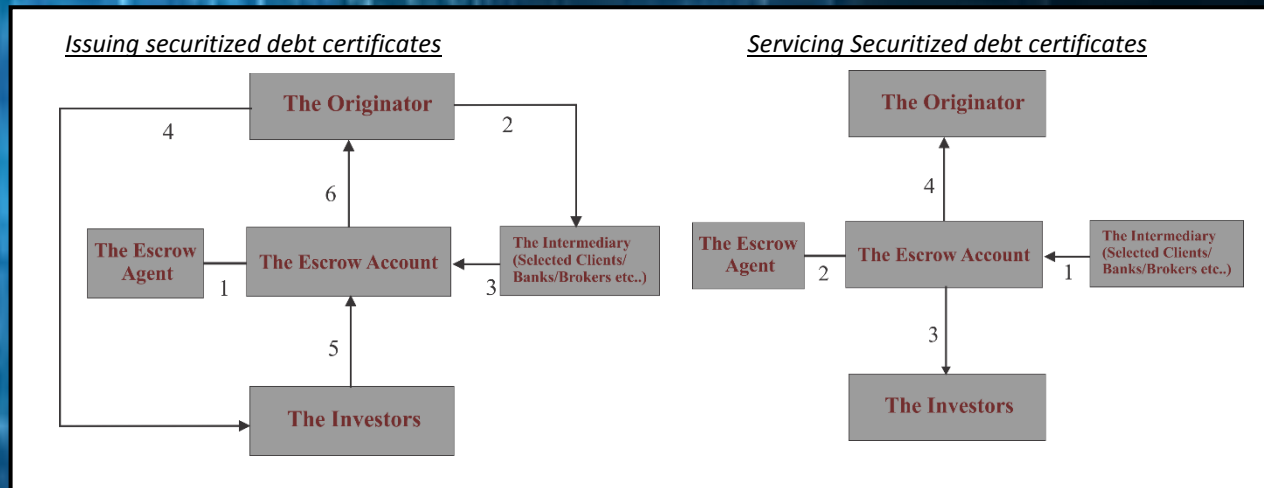
securitization arrangement is for a period of 48 months, there will be 48 individual trust certificates. As a result of this, individual investors can invest their funds in a more flexible manner so that if an investor wishes to invest only in short term investments where maturity is less than one year, he can purchase only the trust certificates of first 12 months leaving the rest of trust certificates to another investor(s). Further, the interest rates can also be adjusted based on investor and originator requirements where a set of trust certificates can be issued with fixed interest rates and the remaining trust certificates can be issued with floating interest rates.

### **Securitizations with an Escrow Agent**

As an alternative to the above discussed structure, securitizations can be established with an Escrow Agent instead of a trustee. The difference here is there will be no SPV to issue the fixed income instrument and hence it will be the originator who issues the instruments. Further, the fixed income instruments issued will be known as "Securitized debt certificates" instead of the name "Trust Certificates" which

was used in the earlier scenario. The structure and process of this

arrangement can be identified as below.



In the above structure, initially an escrow account is opened solely for the transaction and an escrow agent is appointed who will have the sole withdrawal power to the escrow account. Thereafter, parties to the transaction (The originator, Escrow agent and the investors) agree upon a securitized debt agreement which includes the rights, duties and other relevant terms and conditions for the transaction. After that, few top notch clients of the originator who are maintaining service contracts with originator will be selected. The clients will sign an Irrevocable Letter of Undertaking agreeing to transfer all service fees due to the originator

during a pre-determined period, directly to the Escrow Account. After this step, the originator issues securitized debt certificates based on the strength of the cash flows from the selected clients. The investors purchase these certificates by paying through the escrow account. The escrow agent then pays the funds raised to the originator.

When servicing the debt certificates, as per the irrevocable letter of undertaking, clients pay the service fee directly to the escrow account. The escrow agent monitors the account and use the funds received to the account to service the debt certificates monthly. After servicing the debt

certificates, if any extra money is remaining in the escrow account, it will be paid back to the Originator.

### **Credit enhancements**

In order provide added comfort to the investors through mitigation of risk, several credit enhancements are incorporated to the structure. Some of the credit enhancements can be briefed as following.

- **Over Collateralization** - The securitization is carried out to ensure that the cash inflow to the Trust is a certain percentage (usually 30%) more than the cash required to meet the obligation to the Investors in the Trust Certificates.
- **Mortgage over funds receivable** - The cash flows assigned to service the Trust Certificates are mortgaged to the trustee. In a situation of a securitization structured based on receivables from Lease/Hire purchase agreements, the underlying assets of the Lease/Hire purchase agreements are also mortgaged to the trustee so that in a situation of default, trustee can use the proceeds of the sale of the underlying asset to service the Trust Certificates
- **Irrevocable power of attorney** - An irrevocable power of attorney is given by the originator in favour of the trustee to collect the receivables directly in a situation of default by the originator.
- **Replacement of Non-performing agreements** - The originator undertakes to replace any non-performing contracts (e.g.: hire purchase/lease contracts that have fallen into arrears for more than two months) with similar up-to-date performing contracts.
- **Recourse** - In the event that there is a shortfall in the proceeds from the receivables that were securitized, the originator is obliged to cover up any shortfall by transferring adequate amount of funds to the Trust.

However, if an escrow account is used instead of a trustee, following

additional credit enhancements will be available

- **Irrevocable Undertaking from the selected Clients to directly transfer Future Service Fees to the Escrow Account-** Originator will irrevocably instruct the Selected Clients to directly deposit service fee receivables in to the Escrow Account and the Selected Clients will undertake the same.
- **Direct Transfer of Funds** – In order to reduce any exposure to the risk of the Company, funds will be transferred directly from the Selected Clients of Originator to the Escrow Account.
- **Lien over funds in the Escrow Account** – The Escrow Agent has the first claim to the funds in the Escrow Account in order to pay back lenders/investors

**Unique features in Sri Lankan practices of securitization**

The practices followed in the securitizations in Sri Lanka slightly differ to global practices in aspects such as the structure. The most prominent difference is “recourse to the borrower” in Sri Lankan securitization arrangements. Globally, in securitizations, the receivables / cash flows selected as the security to the transaction are removed from the balance sheet of the borrower since these receivables/ cash flows are sold to the SPV. As a result, if a client of the borrower defaults the payment, recourse stays with the SPV and the originator is not responsible for the default. However, in Sri Lankan practices the cash flows are not sold to the SPV, but are only mortgaged to the SPV. As a result, if a client defaults, it is the responsibility of the originator to replace the client’s cash flow with an alternative client or to somehow pay the cash required to the SPV. Here the cash flows/ receivables stays in the balance sheet of originator after the mortgage. Hence the practice followed in Sri Lanka cannot be recognized as a “pure securitization” which is the practice in global markets.

*Akila Karunarathne*

*Graduate 2011/2012*

# FINANCE ETHICS

Does the mere bunch of qualifications make you the perfect finance employee?

As students following finance related subjects, you may dream of one day becoming a top finance executive in a blue-chip company. You may be an expert in finance with a vast amount of knowledge in finance and may be a proud holder of a numerous professional qualifications related to finance. But the day when you first step to your dream company for the first job interview and if the first question is “All of these postgraduate degrees and professional qualifications don’t impress me at all. What I really need is a good liar. Can you do that?” what will be your response? Will you willingly be a good liar to have your dream job or will you just quit your idea of working in that company? If you are not willing to commit your ethical values and principles just for the sake of a higher salary and a reputed position, then, be proud of whom you are since you have knowledge, discipline and concern for ethics.

**What are finance ethics?**

General meaning of ethics refers to the study of human behavior which is right or

wrong.

Finance ethics is also a compartment of general ethics. There is no precise definition for finance ethics. It would be simply defined as a philosophy of investing based on a combination of financial, social, environmental and sustainability criteria. You may haven’t entered to the corporate world yet as an employee but ethical issues in the finance sector do affect you, me and everyone since we all act as consumers of financial services. The finance sector is in general, a vast area since it encompasses banks, insurance companies, mutual funds, pension funds, etc. Due to the vast size of the industry, it tends to garner lots of headlines, many of which represent its ethical lapses. With recent collapses of local finance companies such as “Pramuka” bank and Golden key, most of the people hold the perception that the financial services sector is more unethical than other areas of business.

**Why the topic of finance ethics is in the limelight?**

Within this finance industry, billions of transactions happen on a daily basis with high level of integrity observed. However, some people may find loopholes in the

existing system to make personal gains at other's expense which emerges the need for finance ethics in almost all the fields of finance.

Moreover, the finance professionals who work in the organizations may sometimes engage in unethical activities which push the whole financial market and financial service industry down thereby affecting the economy as a whole. Finance ethics may in turn assist in preventing these potential ethical lapses thereby allowing all other functions which depend on the effective functioning of finance to run smoothly without any discrepancies.

We are studying finance which is the life blood of any organization. We should be able to act like professional, ethical employees once we step into the corporate world. To achieve that, a thorough understanding regarding the finance ethics is a must. Once you enter the finance sector as an intern or as an employee, you may most probably come across ethically conflicting situations. You may think that you are one of the professionals who upholds high ethical standards, however sometimes, unknowingly, your actions may breach valued ethical guidelines. In addition, if you hold a position where you could contribute in taking actions to minimize ethical lapses in your company, you should have an understanding on the

potential causes which result in ethical breaches. Thus, in the next section I have described some major reasons that might result in finance ethical issues.

### Major reasons for finance ethical lapses

#### ➤ Prioritizing self - interest

The general expectation is that the managers and employees may act in the best interests of their customers and shareholders. Nevertheless, in some instances, professionals may place their own self-interests first to gain favors and perks. Make sure not to allow your self-interests convert into self-greed and selfishness. As per Ronald F. Duska, "If you accumulate for the sake of accumulation, accumulation becomes the end, and if accumulation is the end, there's no place to stop." So, don't fall into the trap!

#### ➤ Belief that the finance ethics may be protected if conformance with law is ensured

Some laws are specifically designed to address unethical actions of finance employees. For example, if a finance manager is aware of business activity that will affect a stock price and uses that information to buy or sell stocks for financial gain, he has broken a trust with his employer and broken laws established by the Securities and Exchange

Commission (SEC). A finance employee who commits this type of fault will be held legally responsible for a crime.

However, some people equate the law principles and finance ethics and believe that adherence with the letter of law will merely lead to ethical acts. In only following the letter of law; they tend to ignore the related ethics which are considered as the spirit of the law. The fact that even though an action may not be illegal, it still may not be moral; is disregarded by most of the finance professionals which result in finance ethical lapses.

#### ➤ Stress exerted by the clients

Sometimes financial professionals might be in a position to ignore the financial ethics due to the push exerted by their clients to act unethically. This stress will become significant if you are new to the company and the client is a “big client” of the firm. It is not uncommon to hear the instances where clients expect their auditors to hide off their creative accounting and window dressing and clients expect their insurance agents to falsify their claims. The finance professionals may also tend to breach the finance ethics if the client is well known and is very valuable to them.

#### ➤ Poor risk control systems

Non adoption of proper risk control systems within the company and high leverage levels will push the finance employees to handle the finance in a way that covers up the imperfections of the company without giving much concern on finance ethics. For instance, if a faulty bonus scheme is adopted in the company, a purely self- interested employee would choose the course of action which contains the highest returns to him.

If you find yourself caught up in an ethically gray area, you should necessarily know the appropriate actions to be taken to avoid breaching ethical values. Moreover, if you act the role of a leader in your company, you should take necessary actions to ensure that your employees adhere to higher ethical standards. In the below section, I have discussed some of the actions that you could take in contributing to uphold higher ethical values in your organization.

#### Solutions for finance ethical issues

##### ➤ Adopt a carefully prepared code of ethics in the company

A code of ethics will provide the employees a set of guidelines to encourage them to behave ethically and responsibly. However, this code shouldn't include any stringent dos and don'ts since the employees will wrongly assume that

anything not forbidden specifically in the code would be acceptable.

Make sure that you include the following in your Code of ethics:

- Act with honesty and integrity, avoiding real or clear conflicts of interest in personal and professional relationships
- Act in accordance with all applicable laws, rules and regulations of governments, and other appropriate private and public regulatory agencies
- Respect the confidentiality of information acquired in the course of business
- Promote ethical behaviour among the associates
- Provide information which is full, fair, accurate, complete, objective, timely and understandable
- Ensure that leader's actions are consistent with the code of ethics

A company code of ethics is valuable only when the actions of the company represent them. As company leaders, you will have to model the behavior you need to see from your fellow employees. Therefore, set the right example, and then your colleagues and fellow staff will act the way you intend them to be. The ethical violations of the company can be

minimized only if the top management gives a higher priority to inculcate an ethics culture within the organization.

- The finance code of ethics prepared should be properly communicated across the company

There would be no use of a comprehensive code of ethics if the staff does not know that there is one. Thus, clear communication of the underlined ethical values and guidelines is crucial since it offers employees the perspective they need to take a decision when faced with an ethical question. The code should also be periodically reviewed to ensure that it is in line with the practical ethical questions that the employees face.

- Make sure that you disclose any conflicts of interests

As an employee, your actions and decisions should always be based on the best interests of the company.

Nevertheless, there may be some instances where your decisions as an employee affect your own interests as well. There is nothing called “innocent conflicts of interests”, so it is your responsibility to assess your actions to examine whether you are related to any action that are in conflict with the company's interests and if so, to disclose them to your employer.

- Consider adherence to ethical standards in establishing incentive schemes

Conducting performance appraisals and rewarding employees based on high performance has become a general practice in most of the companies. If adherence to established ethical practices is also considered as a criterion for evaluating performance, then the employees may be induced to uphold higher ethical standards. Moreover, instead of solely rewarding higher performance, managers should also consider how the higher performance has been achieved. If the higher performance has been achieved by compromising ethical values, then such type of behavior should be essentially discouraged.

Frequent reports of ethical lapses have resulted in a general belief that finance sector is more prone towards ethical breaches relative to other business sectors.

Lack of awareness on basic principles of financial ethics has become more or less a major cause of these ethical breaches. By realizing the major causes of ethical lapses and the relevant solutions which could be adopted, you can contribute in ensuring transparency and fairness in the finance industry for the benefit of everyone involved.

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*Article by;*

*Ama Pramudinie Samarasighe*

## Events organized by the Society

### NADA



NADA is one of the most awaited events in the university calendar. It is a talent show, consisting of singing, dancing, acting and many other forms of entertainment.

Commemorating the 13th anniversary of the Department, SAF this time staged Nada 2015 for the 6th time to showcase the talents of the undergraduates.

“Nada” is also the first complete talent show focusing on areas such as singing, dancing, drama and instrumentals organized by a single Department of the University of Sri Jayewardenepura with the participation of the entire university community.



Prof. Sampath Amaratunge, Vice Chancellor of the University graced the occasion as the chief guest, Dr. U. Anura kumara, Dean of the Faculty of management Studies & Commerce, Prof. Hareendra Dissabandara, Head of the Department of Finance, other lectures of the university were the guests of honor.

## **Sneha Daara 2014**



Sneha Daara is an initiative taken to inculcate a sense of social responsibilities and ethics within undergraduates. This is a project that extends support to a selected group of school children in need of assistance.

The project carried out in Mara/Godakumbura Kanishta Vidyalaya in Kotapola area which belongs to the Kotapola education division, Deniyaya region of Galle province.

The president of the SAF Mr. Dilan Abesundara made an introduction speech to the gathering, students and parents. Dr. Aruna Shantha, one of the senior lecturers of the faculty delivered an inspirational speech on how students should concentrate on education.

Altogether it was a day which generate tear on our eyes and unforgettable day for us.



## SAF Cricket Carnival

SAF Cricket Carnival is an annual event organized by the Students' Association of Finance. It is an open cricket challenge where any student of the university can participate regardless of the faculty. It is a six-a-side cricket tournament consisting of three main categories; male, female and mix. Winners are awarded the SAF Trophy and other valuable prizes.



## Annual Get-Together

The annual get-together of the Department of Finance is one of the most memorable and enjoyable experiences for the students.

This is an event organized by the third year students of the department with the purpose of welcoming the second year students to the Department of Finance, while bidding farewell to the fourth year students. This event aims at strengthening the bond between the students of different batches in the Department.

Each year, the event takes on a different theme (2014- Frostic Frolic). Students have an enjoyable time by taking part in games, entertainment items, competitions and finally by stepping on to the dance floor.





## University Investment Day 2015

The main intention of the programme was to create awareness regarding the capital markets of Sri Lanka and to formulate an investment community not restricted to the university boundaries.

Senior Professor Abeyratne Bandara, delivered the welcome address to a packed crowd stressing the importance of the practical exposure for undergraduates to excel in their careers, followed by the speech of the Chief Guest, Dr. U. Anura Kumara, who stressed the importance of events of this nature with special reference to the current financial and economic status of Sri Lanka.

Next segment of the event was the guest lectures from experts from the industry. Mr. Angelo Ranasinghe, Executive Director, Bartleet Religare Securities (Pvt) Ltd, started the proceedings with how to investing in capital markets in Sri Lanka. Next presentation was made by Mr. Nishantha Hewavithana, Head of Research, Colombo Stock Exchange on mechanism and operations of the capital markets of Sri Lanka. Then, Mr. P. Asokan, CEO, Comtrust Asset Management (Pvt) Ltd, addressed the gathering on the benefits of unit trusts as an investment vehicle. Then Mr. Suneth Perera, Manager, Capital Market Education and Training, Securities and Exchange Commission of Sri Lanka explained securities regulation and the role of SEC. The last presentation was made by Mr. Ravi Abeysuriya, Group CEO, Candor Equities Ltd., through which he shared his thoughts on the current status of capital markets of Sri Lanka.

# Macro-economic review with Mr. Shiran Fernando

*Shiran Fernando is presently the Lead Economist and Senior Product Head at Frontier Research where he drives the growth and strategic direction of the economics research division. He is a member of the Steering Committee on Economic Policy of the Ceylon Chamber of Commerce and provides economic expertise at the monthly Exporters Association of Sri Lanka Management Committee meeting. He has been part of varied economic and business forums as a panelist, speaker and a moderator and is also a contributing writer to LMD's Economic Outlook Column. Shiran has a BSc. in Economics and Finance from the University of London International Programmes. He is also a CIMA passed Finalist, has a Post-Graduate Diploma in International Relations from the Bandaranaike Centre for International Studies (BCIS) and is presently a 2017 Level III Candidate in the CFA Program.*



**Q. Before going to specific questions of the macro economy, what do you think about the current economic situation of the country as a whole?**

Let me put it in this way, it is two years since the current government has come into power. Overall we have seen a big adjustment in the economy. A lot of variables have adjusted in particular the currency and interest rates. There are certain things that are turning in a favorable manner but you will not see them instantly. When it comes to global economy also, there is a lot of uncertainty as well. Due to the lack of FDI, we have been relying on portfolio inflows that is inflows into government securities (treasury bills and bonds). We have been dependent of these government securities whenever markets are favorable. We also need favorable markets to raise sovereign dollar bonds as well. Recent the yield on this has declined.

It is difficult to say whether this is the end of the adjustment but we think most of it has happened as stability could be reached if political factors stabilize and we see improvement in inflows and FDIs. The expectations are for interest rates to come down towards the second half of the year.

We are also under the IMF EFF program and there are a lot of thing that need to meet as well. Since an independent third-party is continuously following the economy, it provides clear guidance as well. The fact that the IMF will be there to

overlook the progress of the economy mainly on fiscal deficit and foreign reserves will be good for the economy.

**Q. That means you are optimistic on the economy.**

It is not on the whole economy but the variables will do better relative to recent years. Over the long term we need to get many important reforms done such so that we see real FDIs coming in and exports growing. Probably next 2-3 years the Government needs to take some hard but important decisions on the economy such as improving the profitability of State Owned Enterprises.

**Q. What do you think about the information inconsistency in the economy?**

Reliable and consistent information availability provides sound direction for investors. This has been lacking in the last two years as it has a lot I think to do with coalition politics given this is the first time that the two main parties are together in the Government.

**Q. Do you think there will be an impact from the proposed equity sale of Hambanthota port, listing/privatization of SOEs and GSP+ concession?**

If we get inflows from the equity sale it will help boost reserves and ease the pressure on the currency. Certain listings of SOEs and if we do get GSP+ concession, it will aid the pressure from the debt bunch in the 2019-2020 period.

We need to see some return from these heavy infrastructure investments given that some of the loans we got to build them are up for repayment. For the port it is like a chicken and egg situation where we need more liners and shipping using the facilities. This proposed equity sale would incentivize the investors and hopefully bring in other investors and make it into a hub for the region.

The ECTA agreement is also a highly debated one. There is a lot of pros and cons to such bilateral agreements in particular on the services sector. However, we can see businesses doing well in countries where there is no FTAs as well such as Bangladesh.

**Q. In the forex market, we have seen the rupee depreciating past 150 per US dollar. What do you think about the forex market and how can we improve the forex reserves situation?**

We are still in the transitioning period from the fixed pegged exchange currency system to a more market driven flexible exchange rate mechanism. Sri Lanka has been very sensitive since October 2016 to about March 2017 to outflows from the local Treasury bill and Bond market. Close to US\$800 million has left the market and that is mainly due to global uncertainty rather than it being Sri Lanka specific.

**Q. The Central Bank of Sri Lanka kept their reference spot rate very low to the market rates. Why did they want to do that?**

It is not the best for the transition as it creates uncertainty and makes the spot invalid. I think it's largely to manage the short-term volatility in the market when the rupee depreciates. It doesn't give assurance to exporters whether to sell their proceeds and importers' payment cycle.

**Q. What kind of role is played by the tourism and remittances?**

We have remittances around USD 7 billion and tourist earnings around USD 3bn. We can expect remittances to go beyond as most of the main destinations are becoming saturated. Around 50% of remittances from the Middle East and those economies are still recovering from the declining in the oil prices. If the oil prices stabilize at current at current levels or rise further, we can expect increased flows with possibly more employment opportunities.

I think tourism can play a bigger role. If we can move from USD 3bn to 6 bn in next 2-3 years, it will have a significant impact on the economy. It is growing at an organic rate without too much of government intervention. Small scale boutique hotels and others in the informal sector are contributing to this growth. Despite the current economic situation, it will be a sector that will continue to grow. To sustain this tourism drive we need to focus on type of tourist we want to attract, improve our current offerings and improve

some of the offerings we provide in particular in Colombo.

**Q. Last few months we were experiencing a situation with foreign investors exiting government securities. How do you justify the investor confidence for a stable capital market?**

Foreign holding of government securities has fallen a lot from 9% to 4%. I think that has more to do with global markets as mentioned earlier. May be some funds might have redemptions due to global pressure. The US Federal reserve is raising their rates as well so there is a bit of a move towards safe haven assets like US Treasuries.

I think the key boost to investor confidence will be if there is policy consistency.

**Q. Now let's focus on the fiscal policy, budget proposals and revenue goals. The Government is looking to amend the Inland Revenue act. What do you think about possible ways to increase government revenue to meet recurrent expenditures and debt burden?**

In Sri Lanka, indirect taxes are at higher level compared to the other peer developing countries. This is mainly due to the ease of implementation and collection from such taxes like VAT compared to other direct taxes. But last year we saw an increase in direct taxes as well with the increase of certain taxes. The Government is also trying to minimize revenue leakage while closing some of the loopholes. This

should help boost up tax collection. Recently they introduced RAMIS (Revenue Administration and Management Information System) which is an electronic platform for tax payers with easy access, so that also will be helpful to collect more taxes.

Overall shift is to ensure a better balance between direct and indirect taxes. The new Inland Revenue act is expected to help in this will but will need to be discussed with all stakeholders before it is implemented.

**Q. According to the recent publications on GDP, Agriculture sector is underperforming while the service sector is performing well. What do you think about the composition of GDP and its growth?**

In 2016, GDP has growth of 4.4% in real terms. We see both Industrial and Service sector have performed relatively well like you said while Agriculture sector performed badly mainly due to the drought and the flooding we had last year. Agriculture has 30% of the workforce but it contributes only less than 10% to the economy. The contribution has been coming down due to relying on our historical harvest & produce and exports like tea and rubber. Therefore it becomes very sensitive to weather changes. There is potential for agricultural exports to grow through products such as organic products, aquaculture etc.

Apart from the agriculture, the industrial sector is growing mainly due to the construction sector doing well. Services are doing well due to segments like banking and financial services, tourism and trades services doing well.

Overall on growth it is not really worrying if it is 4.6% or 5% till we have

sustainable plan for the next couple of years. While the economy adjusts, you have to have high interest rates, currency moving all that, we have still managed to grow around 4%-5%.

*Malaka Mapatuna (April 2017)*

*Graduate 2011/2012*



# **REVIEW OF LITERATURE: IMPACT OF MACROECONOMIC VARIABLES ON STOCK RETURNS**

**BY**

**S.D.L. KONGAHAWATTE**

## **Macroeconomic Variables and Stock Returns**

Fundamentally, macroeconomic variables should affect the performance of a business. Favorable economic conditions help businesses to thrive whereas unfavorable conditions make business fail. Thus, there has been number of researchers who tried to link this fundamental relationship and asset returns. Notion of this approach is that stock markets cannot operate in isolation with the economy. Studies of Merton (1973), Ross (1976), Fama and Schwert (1977) and Cox et al (1985) make a significant contribution to the development of early knowledge of this area. These early contributions of former researchers pave the way to the most accredited contribution to the body of knowledge by Chen et al (1986).

## **CRR Factors and Stock Returns**

Chen et al (1986) combine different macroeconomic variables (referred to as CRR factors) that are studied in isolation in previous studies to come up with a new model, where they try to find whether the macroeconomic variables “systematically affect” the stock market returns. The study covers

the period from 1958 to 1984.

Accordingly, they use different macroeconomic variables; growth in industrial production, change in unanticipated inflation, change in expected inflation, unanticipated change in risk premium, unanticipated change in term structure, change in oil prices and real consumption. The argument brought forward in developing the research model is that discount rates and future cash flows that decide the value of a stock are determined by the macroeconomic variables. Accordingly, Unanticipated changes in the risk free interest rates, unanticipated changes in the risk premium, and consumption as a measure of indirect marginal utility of real wealth affect discount rates. Further, industrial production changes that reflect innovations and inflation affect cash flows. According to the study they find that Industrial Production, Unanticipated change in the term structure is positively priced in the market while unanticipated change in the term structure, change in the expected inflation and unanticipated inflation are negatively priced. However, they do not find neither oil price nor consumption growth is priced in the market. This study receives a great recognition all

over the world and inspires many researchers to study in depth in this area.

#### Evidence on the Impact of Macroeconomic Variables on Stock Returns around the World

The studies that attempt to investigate the impact of macroeconomic variables on stock returns in both established and emerging financial markets are not hard to find. However, apart from few studies, consistency in terms of macroeconomic variables used as variables is hardly found. Therefore it is hard to group researches to compare the similarities and differences.

However, the results of the researches could be broadly classified as studies that support the impact of macroeconomic variables on stock returns and studies that do not support the impact of macroeconomic variables on stock returns. The following studies provide results consistent with the notion that macroeconomic variables play a significant role in determining stock returns.

Bagliano and Beltratti (1997) examine the relationship between the macroeconomic variables namely nominal short term interest rate, inflation rate, industrial production and money supply and monthly real stock returns in Italy for the period 1963-1995. They find that there is a strong negative relationship between inflation and real stock return, while the impact of other factors is not so significant.

Hess and Lee (1999) study the relationship between unexpected inflation and monthly stock returns in United States of America, United Kingdom, Japan and Germany

considering two periods that is prewar period (1926-1944) and post war period (1947-1994). They consider two types of inflation namely, inflation caused by demand shocks and supply shocks. They find unexpected inflation can be either positive or negative based on the cause of the inflation of the economy. Thus inflation caused by supply shocks has a negative relationship with the stock returns whereas the inflation caused by demand shocks has a positive relationship with the stock returns. Ibrahim and Aziz (2003) analyze relationship between monthly stock returns and four macroeconomic variables namely, real output (industrial production), money supply, price level and exchange rate in Malaysia. Their results suggest substantial relationship exist between macroeconomic variables and stock returns. According to their findings, industrial production and price level have a positive relationship and exchange rate and money supply exhibit negative relationship especially in the long run.

Shanken and Weinstein (2006) using the information during the period of 1958 - 1983, again test the impact of macroeconomic variables identified by Chen et al (1986). They conclude that the impact of macroeconomic variables on stock returns is similar to the findings of Chen et al (1986).

Humpe and Macmillan (2007), study the impact of macroeconomic variables on monthly stock prices in the US and Japan. The macro economic factors considered are industrial production, the consumer price index, money supply, long term interest rates. The study reveals that in USA stock prices are positively related to industrial

production and negatively related to both the consumer price index and a long term interest rate. There is an insignificant relationship between the money supply and stock returns. The Japanese data however, indicate that stock prices are influenced positively by industrial production and negatively by the money supply. Benakovic and Posedel (2010), study the relationship between monthly stock returns and macroeconomic variables. The macroeconomic variables consist of inflation, industrial production, interest rates, and market index and oil prices. The study is a limited one and includes only 14 stocks in the study. The study covered a period from 2004 to 2008. The results indicate that the returns are positively related to Interest rates, oil prices and industrial production. Inflation however, indicates a negative relationship with stock returns. Kuwornu (2011), macroeconomic variables consist of consumer price index, US dollar exchange rates, treasury bill rate and crude oil price to investigate whether macroeconomic variables explain the market returns. The findings suggest other than crude oil price; the other macroeconomic variables have a significant impact to the stock market performance. They find that consumer price index and stock returns have a positive relationship, while treasury bill yield and exchange rates demonstrate a negative relationship with the stock returns.

Elly and Oriwo (2012), study the relationship between macroeconomic variables on Nairobi All Share Index, the economic factors being interest rate, inflation rate and 91 day treasury bill rate. The study covers the period

from 2008 to 2012. The researchers drop the interest rate from the study, as there is a high correlation between interest rates and treasury bill rate. The study reveals that the Treasury bill rate has a negative relationship with the stock market performance, where as a positive relationship exist between stock market and the other macroeconomic variables.

Hossen et al (2011) carry out a study to explore the relationship between oil price, money supply, industrial production, inflation rate and the stock markets in India and China during the period 1999 to 2009. According to their study, there seem to be both long term and short term links between the macroeconomic variables and the stock returns. In the short run oil price is significant only in India and it is positive. Money supply is insignificant in both countries. Other factors are insignificant for both countries. The long-run analysis reveal that crude oil price have a positive relationship to stock returns in china where as in India it is negative. Further, the relationship between money supply and stock returns is positive for China where as it is negative for India. The relationship between Industrial productions is significant only in China and it is a negative relationship. In both countries, inflation has a positive relationship with stock returns.

Singh et al (2011), study the causal relationship between Taiwan stock return index and certain macroeconomic variable namely employment rate, exchange rate, gross domestic product, inflation and money supply. The portfolios are formed based on size, Price earnings ratio, price to book ratio and return. The

findings suggest the exchange rate and gross domestic product seem to affect returns of all portfolios irrespective of the size, P/E ratio, price to book ratio or return. Inflation rate, exchange rate, and money supply demonstrate negative relationships with returns for portfolios of big and medium companies.

Naik and Padhi (2012), carry out a study in India and investigate the relationship between the stock market returns and the macroeconomic variables namely, industrial production, inflation, money supply, treasury bills rates and exchange rates. The study covers a period from 1994 to 2011. The study reveals that there is a long term relationship between macroeconomic variables and stock market returns. The stock prices seem to have a positive relationship with the money supply and industrial production and there seem to be a negative relationship with inflation. However, exchange rate and short term interest rates are not significantly related to stock prices.

Zhu (2012) carries out a much narrower study in Shanghai stock market, where he study the impact of inflation, money supply, exchange rate, industrial production, bonds, exports, imports, foreign reserves and unemployment to the energy sector of the stock market. The study covers a period from 2005 to 2011. According to the study, exchange rate, foreign reserves, and unemployment have a significant positive effect and exports demonstrate a significant negative effect on stock returns of the energy sector.

Kirui et al (2014) study the impact of macroeconomic variables and Stock returns. The macroeconomic variables

are namely, gross domestic product, treasury bill yield, exchange rate and Inflation. They consider period from 2000 to 2012 and they consider quarterly returns for their study. In their study they find that exchange rate is negatively related to stock returns. However, their results do not suggest that any relationship exist between stock returns and other macroeconomic variables.

Hasan (2011) test the impact of macroeconomic variables on stock returns on Bangladesh. In this study, semiannual returns are used. He uses data from 2001 to 2004 and the macroeconomic variables considered are money supply, interest rate, gross domestic product and inflation. In this study however, sector wise analysis is conducted considering the different sectors in the Dhaka Stock Exchange. In this analysis however, macroeconomic variables found to be significant in determining stock returns of the Dhaka Stock Exchange only for the financial sector. In that sector also only the inflation is found to have a positive significant effect on stock returns.

Nkoro and Uko (2013) study the impact of macroeconomic variables on Nigeria stock market using annual data from 1985 to 2009.

Macroeconomic variables include inflation, government expenditure, manufacturing output, interest rate, money supply and exchange rate. The study reveals that stock returns are positively related to inflation and government expenditure, while stocks are negatively related to manufacturing output and interest rate.

Schwert (1990) study the relationship between the stock returns and

industrial production growth in US market considering the time period from 1889 - 1988. In this study, unlike most of the previous studies, annual returns are used. The results of the study indicate that there is a strong positive relationship between the industrial production growth and the annual stock returns.

Zaighum (2014) study the impact of macroeconomic variables on stock returns in Pakistan. The selected macroeconomic variables consist of consumer price index, industrial production index, market return, risk free return and money supply. The period considered for the study is from 2001-2011 and use annual returns for the study. The results of the study indicate that stock returns are positively related to market return and industrial production whereas negative related to consumer production index, risk free return and money supply.

The studies discussed above provide evidence supporting the impact of macroeconomic variables on stock returns. However, there are number of researchers that show evidence to the absence of any significant impact of macroeconomic variables on stock returns.

Rjoub et al (2009) investigate the impact of macroeconomic variables on stock returns in the Istanbul Stock Exchange on a monthly basis from 2001 to 2005. The macroeconomic variables comprise the unemployment rates and the macroeconomic variables deployed by Chen et al (1986).

Absence of an established bond market in Turkey is a major limitation they face. However, the researchers use market risk premium measured by the difference between market return

and the risk free rate of return as a proxy for default risk premium. The findings of the study indicate that the macroeconomic variables used in the study demonstrate very weak pricing relationships. Thus, they come to the conclusion that there are factors other than CRR factors that can have an impact on stock returns.

Shiblee (2009), study the impact of inflation, Gross Domestic Product (GDP), unemployment, and money supply on the stock prices of the industrial sector of the NYSE. The study is conducted for the period from 1994 to 2007. The findings of the study reveal that the money supply has a considerable positive impact on stock prices. However, he postulates that the impact of macroeconomic variables on the stock prices is weak.

Izedonmi and Abdullahi (2011), study the impact of the macroeconomic variables on the monthly stock returns of Nigerian Stock Exchange (NSE). They employ three macro-economic factors namely; market capitalization, exchange rates, and inflation rate and use data from 2000 to 2014. Similar to the findings of Rjoub et al (2009), they arrive at the conclusion that none of the macroeconomic variables employed in the study demonstrate a significant relationship to stock returns in Nigeria.

Khalid (2012) carries out the study of investigating the effect of macroeconomic variables on the behavior of monthly Karachchi Stock Exchange (KSE) return. The macroeconomic variables he considers for the study includes inflation, exchange rate, and treasury bill rate. The study covers a period from 2000 to 2010. His results suggest that none of

the macroeconomic variables make significant impact to stock returns. Thus, he postulates that macroeconomic variables cannot explain the changes in the returns of the stocks of Karachchi Stock Exchange.

Butt and Rehman (2010) carry out a study to examine the relationship between stock returns and macroeconomic variables. The macroeconomic variables selected are market return, inflation, risk free rate, exchange rate, industrial production and money supply. The selection criteria for the companies are data availability, profitability and performance. The study covers a 10 year period. The study reveals that although the market return is the decisive factor for stock returns, the overall strength of the model increases as the macroeconomic variables are introduced. Their results suggest that market return is significant and positively related to stock returns while the other macroeconomic variables relationship with stock returns is insignificant.

The above discussion reveals that the researches are in different categories according to contexts, factors used and findings. When the scopes of the studies are summarized, it is evident that the majority of the researchers have selected the macroeconomic variables from a common set of small group. And the most popular factors seem to be Inflation, interest rate, industrial production, money supply, oil price and exchange rate. However, when the selected macroeconomic variables are put in to a study, there seem to be no common agreement between selecting the factors other than interest rates and inflation. It is

evident that in almost all of the studies inflation is taken in to consideration in general and may be in different forms i.e. expected and unexpected inflation. Another important observation is that almost all the researchers have used at least one of the macroeconomic variables used by Chen et al (1986).

### **Evidence on the impact of Macroeconomic Variables on Stock Returns from Sri Lanka**

When it comes to macroeconomic variables ability to explain returns of stocks in Sri Lanka, much published works are difficult to find. However, Azeez (2003) try to find the empirical evidence whether the macroeconomic variables are priced in the Sri Lankan Stock Market using Arbitrage Pricing Theory. Accordingly, Gross Domestic product, Money Supply, Inflation, Call rate, and Exchange rate are selected as the macroeconomic variables. The study covers a period of 12 years from 1992 to 2001. One of the main features of this study is that the omission of dividend gains when the returns of the stocks are calculated. On the other hand like most of the researches in this area, industry portfolios are formed. In this study he finds that money supply, inflation, exchange rate, and gross domestic product have a significant impact to the stock returns and beta is unable to explain any amount of risks that cannot be explained by macroeconomic variables.

Menike (2006) study whether that money supply, exchange rate, inflation rate, interest rate, lagged money supply, lagged inflation rate determine the stock prices of Colombo Stock Exchange during the period 1991 to

2002. Despite the fact CSE is a very small market; the study is limited to less than 25% of the total companies in the total market. According to her findings, collective economic factors make a significant impact to the stock prices in Sri Lanka. She finds that while stock returns are negatively related to exchange rate, inflation rate and Treasury bill yield, there is a positive relationship between stock returns and money supply. Further, Wickramasinghe (2011) examines the relationship between stock prices and macroeconomic variables in Sri Lanka to find whether the Sri Lankan stock market is semi-strong form efficient. The macroeconomic variable included in the study are monthly figures of US dollar exchange rate, three month fixed deposit rate, Colombo consumer price index, narrow money supply, and the gross domestic product of Sri Lanka. The study covers a period of 20 years from 1985 to 2004. The study reveals that for both horizons that are short run and long run, there is a causal relationship between share prices and macroeconomic variables. His findings suggest that there is a negative relationship between macroeconomic variables and stock returns. Similar to the international evidence, Sri Lankan studies in this area also does not seem to have a common agreement in selecting the factors. Further, as far as results are concerned, absence of consistent results is another noteworthy feature.

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## **Inherent of financial crisis: Treasury management**

The continued economic instability and increasing regulation on the financial industry over recent years has brought much change and challenge to the financial services industry. It can be argued that change initiated by Financial Crisis has brought a previously forgotten division in the companies to the front, which is none other than Treasury.

Treasury Management concept has become a trending topic in to the finance world which plays a critical role either in manufacturing company or a bank or any other form of a business. In broader manner Treasury covers cash management, corporate finance and financial risk management and it is always evolving. It is a more or less a process of administering of the financial assets and holdings of a business. The ultimate objective of most treasury management departments is to optimize their liquidity, make sound financial investments for the future with any excess cash, and reduce or

enter into hedges against its financial risks.

In this article we will focus on what a corporate treasury does and how a treasury of a bank operates to streamline the above said changes and challenges. There is no clear definition for corporate treasury or bank treasury. Treasuries of both are focusing on the one main objective, but in different ways.

### **Corporate Treasury Management**

First let's look at the corporate treasury management. It will be easy if we start with what a corporate treasurer does. It is a role which maintaining and improving of financial health and success of a business and main responsibilities lies to determine financial strategy and policy, arranging appropriate funding and effective and profitable utilization and finally managing financial risk in an organization.

There are five core treasury functions that you could specialize in as a treasury professional, as defined by

The Association of Corporate Treasurers (ACT). These are:

- Capital markets and funding

This function covers options that are open to a company for their funding for future projects and the appropriate way and mix of funds are to be raised to finance the business and on what terms such funding can be acquired and managed. It is a broad area that often requires building external relationships and negotiating with providers of either equity or debt. For example it may be simply whether an asset should be purchased or leased?

- Cash and liquidity management

Cash and liquidity is principally about ensuring that the working capital needs of the company are met within the specific requirements and regulation and in the most cost effective manner. Avoiding large pools of cash that are not effectively deployed or incurring the unnecessary costs of unforeseen short term borrowing.

- Corporate financial management

Companies need to ensure that their corporate and financial strategies are appropriately aligned with their business modules and goals. For example a company should determine on the most appropriate mix of capital structure? How are potential investments appraised? Is an asset providing the required return and if not should it be disposed of? Corporate financial management

includes ensuring that legal and tax issues are appropriately considered.

- Risk management

Understanding and quantifying the business and financial risks that a company is taking can be identified risk management. It ensures the returns are adequate and that appropriate risk management techniques are deployed. This may involve looking at the effect of interest rate and exchange rate moves and putting the appropriate hedges in place. It is about understanding the risk appetite of a company and ensuring that executive management are fully aware of their exposure.

- Treasury operations, controls and corporate governance.

This element is about putting the preceding four into practice in a coherent and appropriately managed way. It is about managing a treasury department and its various functions in an environment where priorities may regularly shift. It requires effective communication and for executive management to be confident that the treasury department is aligned with its aims and objectives. The emerging trend, corporate governance focuses to ensure accurate valuation of financial instruments, accounting of Treasury transactions, Provision of covenant tests and information to investors, Provision of compliance information to regulators and finally implement and manage treasury policies and procedures.

In addition to that investor relations can also be considered as the most evolving and competitive which requires interpersonal skills rather analytics. Providing performance and risk analytics to the board and management and be corporate with Board and Investor relations on shareholders matter is a key activity under this function and it enables organization to access capital the right time, price and conditions. Further managing relationships with banks, credit rating agencies and regulatory and non-regulatory institutions and other stakeholders enables relationship benefits from proactive communication and ensure reputational risk.

When considered above broad functions, we can identify typical work activities that need to be performed by the treasuries of both Corporates and Financial institutions.

- managing daily cash balances and trading in the financial markets
- ensuring that a company's cash flow is adequate to allow it to operate effectively
- forecasting cash payments and anticipating challenges arising from limited cash flow
- undertaking risk management activities to protect a company's financial well-being
- analysing the impact of financial markets on the performance of products or services
- making decisions on company finances, for example, the funding of company operations
- progressing specific financial projects, such as acquisition of another business
- evaluating the financial impact of new business ventures
- negotiating loan or overdraft terms with company bankers
- creating solutions to new financial challenges by applying financial or treasury knowledge
- liaising with other departments, such as tax and accountancy, on a range of issues
- providing advice on financial matters impacting on the company as a whole
- taking responsibility for, and supervising the work of, more junior members of staff
- liaising with bankers and investors and maintaining positive working relationships
- keeping up to date with financial and industry developments
- attending board and senior management meetings
- Making presentations to the company board on specific financial issues.

### **Bank Treasury Management**

Banks are there to manage customers' money, but who manages a bank's money and how it operates? How does a bank determine where to invest their excess its capital across its business and how to manage bank's reserves to smooth operation and customers'

demand? How does a bank make sure that each of its scope of business generate enough cash to serve its clients and function efficiently while keeping enough cash available centrally at all times to cover any unexpected market developments? The treasury of a bank is responsible for balancing and managing the daily cash flow and liquidity of funds within the bank. The department also handles the bank's investments in securities, foreign exchange, asset/liability management and cash instruments.

Functions of an integrated treasury can be categorized as follows:

- Reserve Management and Investment
- Liquidity and Funds Management
- Asset-Liability Management
- Risk Management
- Transfer Pricing
- Derivatives Trading
- Arbitrage
- Capital Adequacy

It can be seen that most functions are similar to the functions of a corporate treasury. But in addition to them there are some important functions as well. Foreign currency management plays a vital role. It is about effective management of foreign currency resources needs to be managed in such a way that it would not make inadequate excesses positions i.e., “Overbought” or “Oversold” and at

the same time cash flow is not affected. In addition to that, Forex Cash Management is equipped with various other alternatives such as Currency Swaps i.e., lending in one currency and borrowing in another currency, foreign exchange i.e., swapping of one currency into other foreign currency or local currency for deployment so as to maximize the yield without creating the position and affecting the cash flow.

Asset and Liability Management (ALM) is a pivotal discipline relevant to banks and financial institutions where balance sheets present different challenges and highly regulated. When it comes to banking institutions, the most strictly interrelated functions are treasury and ALM Both functions with each other and collaborate in managing both liquidity, interest rate, and currency risk at individual level and macro level: Where risk analysis and medium- and long-term financing needs being the major ALM activities, treasury manages short-term funding (mainly up to one year) including intra-day liquidity management and cash clearing, crisis liquidity monitoring.

The treasury department is manned by the front office (dealing room), mid office, back office and the audit group. In some cases the audit group forms a part of the middle office only. This structure may change to the operating structure, reporting structure and entity-wise policies and procedures.

The front office consist of global market head, dealers and traders

constitute the front office. In the course of their buying and selling transactions, they are the first point of interface with the other participants in the market (dealers of other banks, brokers and customers). They report to their department heads. They also interact amongst themselves to exploit arbitrage opportunities.

A mid office set up is an independent of the treasury unit. It is responsible for risk monitoring, measurement analysis, performance analysis of the dealers and reports directly to the Top management for control. This unit provides risk assessment to Asset Liability Committee (ALCO) and is responsible for daily tracking of risk exposures, individually as well as collectively.

The back office undertakes accounting, settlement and reconciliation operations of the deals executed by the treasury front office. Hence back office should be more accurate and should have fundamental knowledge on the activities of the treasury and market. The audit group independently inspects daily operations in the treasury department to ensure adherence to regulatory systems and procedures.

### **Conclusion**

Future treasury strategy must now grab the needs of the modern business practice, being in line with fundamental organization culture meeting the wider range of expectation of the stakeholders, especially regulators.

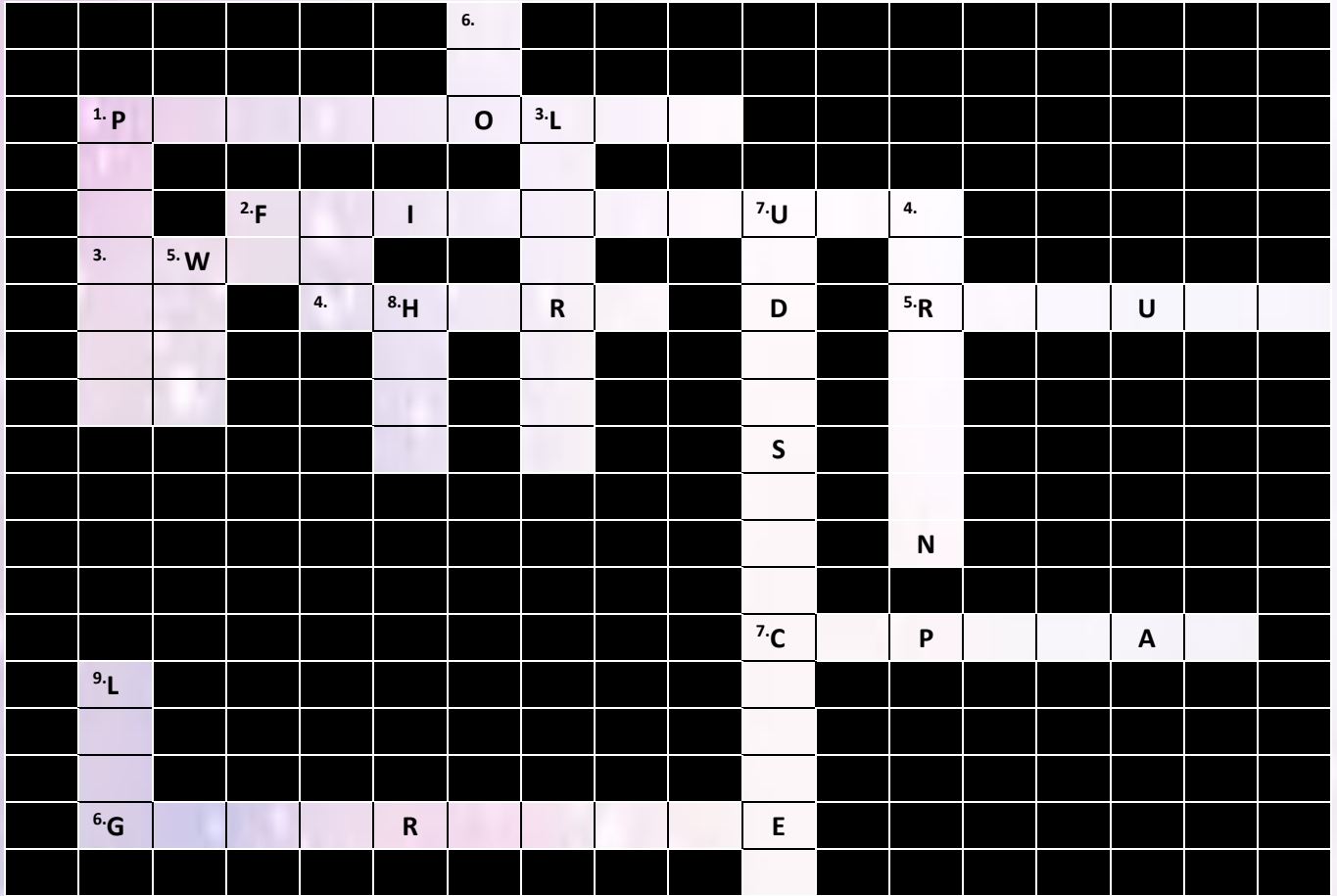
Equally banks and corporates as a whole will need to adapt their business and operating modules to fit for broader macroeconomic factors in order to meet inevitable demand placed by the business environment in terms of funding, liquidity management, capital management, risk management and effective information technology in order to effectively and efficiently position themselves.

In summary, global financial crisis brought the treasury function as the pivotal role in the business practice especially treasury function of banks. Scarce resources, increased liquidity, high complexities, turbulent operational environment and need for integrated management of assets and liabilities are shaping the decision making processes in today's and future finance era. Evolving regulatory standards will drive complexity for years to come and as a result both corporates and banking institutions must prioritize treasury function by revisiting strategic planning methods, reevaluating collaboration mechanisms and re-tooling the organization and operating culture.

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# Puzzle



**Across:**

1. A collection of investments.
2. If a security's intrinsic value and market value equals, we call that security is ..... In the market.
3. A type of derivative
4. Unit of capital of a listed company.
5. The gain or loss of a security in a particular period is called
6. The framework of rules and practices by which a board of directors ensures accountability, fairness, and transparency in an entity's relationship with its all stakeholders
7. A factor of production

**Down:**

1. Investors who buy investments with the intention of low maintenance and long run appreciation.
2. The amount of debt used to finance assets can be defined as .....
3. A measure of the "Average Maturity" of the stream of payments associated with a bond.
4. firm's cost of capital in which each category of capital is proportionately weighted
5. An ... is the first time that the stock of a private company is offered to the public.
6. A situation in which the demand for an initial public offering of securities is less than the number of shares issued
7. .... currency is a currency widely accepted around the world
8. Purchasing (or contracts to purchase) of commodities, financial instruments, and shares, etc., with the intention of holding them in anticipation of a price increase.

