

A Tale of Two Central Banks

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Abstract: *This teaching case examines the roles of the central banks in a developed and a developing economy (the Bank of England and the Reserve Bank of India). It is obvious that though the roles of both the central banks are essentially the same, the economies in which they function will cause their priorities to be different in terms of their strategic and operational approaches. The case therefore looks at the different economies and political milieus in which the two banks function. The case does this by analyzing the differences in the perspectives of the Reserve Bank of India and the Bank of England and also delves into the reasons behind these differences. It raises the question whether it is easier to be the head of a central bank in a developed or developing economy, (based on Dr. D. Subbarao's comment that the circumstances dictate how the Governor performs his functions). This is not an easy question to answer and the case, with the help of the various arguments, helps the reader to figure this out based on his or her own perception of the challenges each of the central banks face. Central banks occupy a unique space in their national governments and in the global economy. The study of central banking however, has too often been dominated by an abstract theoretical approach that fails to grasp central banks' institutional nuances. The case concludes with a Teaching Note which also raises a few discussion questions along with the answers.*

Key Words: *central bank, central bank governors, challenges, developed economy, developing economy,*

1. INTRODUCTION:

Dr. D Subbarao (2016), the Reserve Bank of India's Governor who was Dr. Raghuram Rajan's predecessor said, "every Reserve Bank Governor is a creature of the circumstances in which he is called upon to perform. He has to make choices and decisions based on his own learning and experiences. The Governor is condemned to be free!"

This is a perceptive comment and what follows in this paper builds on Dr. Subbarao's remark. The paper does this by analyzing the differences in the perspectives of the Reserve Bank of India and the Bank of England and also delves into the reasons behind these differences. It raises the question whether it is easier to be the head of a central bank in a developed or developing economy, (based on Dr. Subbarao's comment that the circumstances dictate how the Governor performs his functions). This is not an easy question to answer and the paper, with the help of the various arguments, helps the reader to figure this out based on his or her own perception of the challenges each of the central banks face. For example, in developing countries, i.e. in a developing economy, the central bank has to play a much wider role. Besides performing the traditional functions, the central bank has to undertake responsibility of economic growth. The central bank also has a crucial function to develop the banking and financial system of the country. This function (for a central bank) is not there so much in a developed economy. The banking system in a developing economy is also changing rapidly and it is the additional function of the central bank to monitor these changes and ensure that the banking system in the country is not put to undue strain. In India, the central bank additionally has to monitor the high level of non-performing assets in public sector banks, which have recently forced these banks to make large provisions, thus affecting their profitability. This is of concern to the central bank as they are ultimately responsible for the good health of all banks in the country. This problem is not so much evident in a developed economy. But then, each central bank operates in its own milieu and their basic function is to ensure the sustainability of the banking sector.

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Different Economies/ Different Challenges Faced by the Two Central Banks

Economy- the UK

The United Kingdom, consisting of England, Scotland, Wales and Northern Ireland is one of the most influential countries in the world. While the halcyon days of the British Empire are long gone, it is a permanent member of the United Nations Security Council, a founder member of North Atlantic Treaty Organization, a nuclear power. It is also the fifth largest economy in the world in terms of Gross Domestic Product measured in 2015 US dollars. In per capita terms, which adjusts for population size, and also adjusts for cost of living disparities across the globe, an average UK resident earned 41,324.6 USD (adjusted for purchasing power parity). It thus finds itself among the high income, developed countries in the world. Its economy is dominated by the service sector which accounts for almost 80% of the economy, and about 19 % is accounted for by industry. Agriculture accounts for only 0.6% of the economy. Thus, it is an advanced economy with relatively high standards of living. The British pound is one of the most sought after currencies in the world; about 5 % of the world's foreign exchange reserves are held in British pounds putting it behind the US dollar and the Euro. Thus, it enjoys an elite status as a reserve currency. It is also one of the most important countries in the world in terms of share in world trade: both in merchandise and service trade, it appears among the top 10 countries in the world. The high standard of living coupled with opportunities available often attracts immigrants into the UK in large numbers, which has been a contentious political issue in recent times. It is a free market economy with few institutional controls and a limited role for the state, with well-developed markets for goods and services, as well as well-developed financial markets, which has a great degree of connectivity with the rest of the world. It has strong, deep democratic foundations (even though it is nominally a monarchy), and a strong legal system founded on the common law.

For such economies, the primary challenge of policymakers and central bankers is to manage the business cycle, i.e., fluctuations in the economy in the relatively short run. The economy doesn't have many people suffering from crushing poverty. Moreover, the median age of the population is above 40 years, and with a significant number of retirees, avoiding high inflation rates and keeping unemployment in check are the biggest priorities of policy makers.

In this scenario, the most influential macroeconomic theorists who have influenced the behavior of the central bankers over the last half century are Milton Friedman and Robert E Lucas, Jr., both Nobel laureate economists from the Chicago School. Friedman was a monetarist, a school of thought that attaches a great deal of significance to money supply to control price levels. Friedman's analysis of the Great Depression proposed that wrong policies of Federal Reserve resulted in decreasing money supply in the US economy resulting in deflation. Equally notably, he was harshly critical of the policies of the post-world war Central bankers that were influenced by Keynesian thinking that advocated a very loose monetary policy resulting in high levels of inflation during the 1970s. He opined that rule-based money growth will alone contain inflation, and Central bankers should prioritize inflation control, and perhaps only focus on controlling inflation to combat business cycle fluctuations. Lucas' theory of rational expectations discussed how sustained periods of inflation growth will lead to entrenched expectations about elevated price levels, and the only way to kill such entrenched expectations is to surprise or shock the economy. Modern central bankers, most notably Paul Volcker and Alan Greenspan, whose tenures as the Chairman of the United States Federal Reserve spanned almost three decades ending in 2006 adhered strictly to these principles during their tenures.

For advanced economies, this context changed post the Great Recession triggered by the collapse of the housing bubble in the United States, punctuated by the collapse of Lehmann Brothers, and the subsequent global recession that hit the advanced economies especially hard. Alan Greenspan, who in his role as the Federal Reserve Chair presided over the unregulated market of subprime mortgages and financial derivatives including the mortgage backed securities and credit default swaps that were considered crucial to the collapse of the housing market was forced to admit that his belief in deregulation and self-correcting mechanisms in the market was shaken.

Economy – India

India has the second highest number of people in the planet, giving it considerable size, and thus, importance in the world economy. In absolute terms, India's GDP was more than USD 2 trillion in 2015, making it the seventh largest economy in the world. However, the per capita income of the country remains at USD 1581.6 at current US dollars, and adjusting for purchasing power parity, it is at USD 6088.6, which puts it among the middle to lower income group in the world and below the world average. With slowing Chinese growth, it has become the fastest growing major economy in the world. However, it also is a country where a large number of people are poverty stricken, and the country ranks consistently low on various measures of human development index, ease of doing business etc. The contribution of agriculture to the economy's output is almost 16%, and more notably, almost half of the population depends on agriculture for its livelihood. For a long period of time since its independence in 1947, India was a mixed economy with significant importance being accorded to centralized planning of the economy rather than establishing competitive markets. The push towards a market economy started in earnest in 1991 during the liberalization of the economy.

However, establishing India as a market economy with strong institutions remains a work in progress, and many

reforms are needed to consistently sustain a high rate of growth that has enabled its Asian counterparts like Japan, South Korea and China transform themselves from relatively poorer to richer economies. Demographically, India is a relatively young nation, with a median age of 27 years as of 2015. The country's population is aspirational, and is eager to see itself as a dominant global player. India is militarily a nuclear power, and while it has not been able to secure a place for itself as a permanent member of the UN Security Council, it has consistently engaged itself in the world affairs. Its share in the world trade is 2.02 % as of 2015, with exports of services being noteworthy due to its information technology sector. The financial markets are still being developed, with a large push towards financial inclusion so that many poor people come under the ambit of a formal banking system.

The challenge facing an economy like India is rapid growth and transformation of the economy from a rural agrarian base to the modern industry and service based economy, which will pull people from the relatively less productive agriculture to industry and services, and also drastically reduce instances of poverty. Along the way, the economy also needs to develop deep financial and credit markets, institute reforms in the labor market, and dispense with controls in the economy that encourages crony capitalism and rent-seeking behavior by market participants, opens up international trade, encourages foreign direct investment and development of deep foreign exchange markets. Development of institutions that aid the functioning of such markets is as much a challenge as maintaining macroeconomic stability for a regulator. Complicating matters is the fact that macroeconomic data collection from official agencies that are considered crucial for policy makers either does not exist, or are much less reliable when they exist, which hinders development of macroeconomic research for such countries that can inform policy. It is noteworthy that for all of Rajan's fame as a researcher, very few, if any of his publications focused on macroeconomic aspects of India. Absent an appropriate framework for evaluating the macro-economy, either theoretically or empirically, policymaking can become an exercise in guesswork rather than informed decision making. A political environment that feeds the aspirations of such a country, but does not reflect on the reality of current state of affairs can bring additional pressure on the functioning of a regulator.

2. CHALLENGES:

The Bank of England indicated in September 2015 that climate change was a big worry for central bankers. The New York Times of 1 October 2015 quoted the Governor Dr. Mark Carney as saying that "We don't need an army of actuaries to tell us that the catastrophic impacts of climate change will be felt beyond the traditional horizons of most actors — imposing a cost on future generations that the current generation has no direct incentive to fix," he said. "In other words, once climate change becomes a defining issue for financial stability, it may already be too late."

A second challenge for the Bank of England was 'throughout, the Bank should reinforce its existing culture of excellence as a learning institution that engages with academia, other central banks and private sector experts in the pursuit of its core objectives (2013).'

A third was to put in place a clear shared vision for the Bank needs to be established, synergies from the collection of policy functions maximized and the expanded senior management team melded into a cohesive unit. A fourth was succession planning and talent management will be paramount. The Bank will need to attract, retain and promote an assertive, engaged, accountable staff at all levels. The Bank should develop its team culture that promotes timely, well researched and consensus-based decisions.

Let us look at these in the light of the role of the Governor of the Bank of England. These are:

The Governor leads the Bank of England, and plays an important role in setting monetary and regulatory policy, chairing the Monetary Policy Committee, the Financial Policy Committee and (from next year) the board of the Prudential Regulation Authority. The Governor represents the Bank in important international fora, such as the G7, G20, the European Systemic Risk Board and the Bank for International Settlements in Basel. The Governor is an executive member of the Bank's Court of Directors.

The Governor will work closely with the Chancellor of the Exchequer and HM Treasury, which is responsible for setting the framework under which the Bank operates. The new Governor will lead the Bank through major reforms to the regulatory system, including the transfer of new responsibilities that will see the Bank take the lead in safeguarding the stability of the UK financial system.

The Bank's three main responsibilities will also be a key factor in the wellbeing of the economy. These are -: keeping a lid on inflation; ensuring the entire banking system does not run into the sand; and making sure individual banks do not go bust, landing the taxpayers with a huge bill for bailing them out.

In the light of these responsibilities, it is significant that Dr. Carney has indicated that his major challenges are at a tangent to the ones officially listed. What could be the possible reasons for this divergence?

We feel that one of the main reasons could stem from the fact that the Bank of England is comparatively stable in its operations. It is old, well established and has an economy which is very much more sophisticated than its Indian counterpart. These give the Governor the luxury of looking at problems beyond his or her remit (but connected to them strongly), and addressing them. His Indian counterpart does not have this luxury.

As compared to Dr. Carney's responsibilities, the Reserve Bank of India's functions have been listed as being:

1. First of all, the Reserve Bank of India is responsible for maintaining the financial stability in an economy, since the Governor of RBI is the head of the most prestigious financial institution, he plays a major role in formulating the policies of RBI.
2. Apart from formulating policies, the Governor of the RBI also is responsible for issuing licenses to open new private and foreign banks.
3. The Governor of the RBI is responsible for controlling the interest rates on deposits and advances of the country. However this control is limited to the extent of prescribing interest rates on savings account and a minimum lending rate.
4. The Governor of the RBI is responsible for regulating and administering the financial system of the nation. He is responsible for setting parameters within which the whole financial system will function. Not a rupee can be moved without the permission of the Governor of RBI.
5. The foreign exchange management Act, 1999 which is to facilitate external trade and payment and to promote orderly development and maintenance of foreign exchange market in India is managed by the Governor of RBI.
6. The RBI Governor is further responsible to monitor the issue and destruction of currency and coins which are not fit for circulation in public. He is also responsible to monitor the adequate quantity of currency notes and coins are supplied and in good quality.
7. He also has a major role to play when it comes to helping and promoting functions in order to support national objectives.

The essential difference between the two sets of responsibilities is that the role of the Governor of the Bank of England is more broadly defined. While in essence there is not much difference between them, the Reserve Bank Governor has his duties spelt out in a more specific fashion. Because of this, most Reserve Bank Governors have stuck to what is clearly laid down as being their role and have not deviated from this; and one key aspect of their role is to toe the line of the Ministry of Finance.

In the U.K. there is a system of writing 'open letters' between HM Treasury and the Bank of England (i.e. between the Chancellor of the Exchequer and the Governor). These letters (there were four in 2015 and two in 2016 as of date) cover a very broad range of topics relating to the economy and are available freely for public reading. This is not the case in India. Relations between the Reserve Bank and the Ministry of Finance are kept fairly close to the chest and only the occasional bland press note gives the public a picture of what is happening.

Dr. Rajan's challenges as articulated by him when he took up the job were as follows: (Sunday Times of India, 31 August 2014):

Firstly, change the conversation which had become focused on the interest rate.

Secondly, bring consumer prices under control.

The third was to highlight positives in the financial sector.

The fourth was to bring inflation under control.

Improve investor confidence in the markets.

And finally, restructure the Reserve Bank of India.

What is different about the two sets of challenges is that Dr. Rajan's articulated challenges are mainly based on taking corrective measures. In other words, wipe out the mistakes of the past and use his tenure to clean up the banking system and focus on essentials and basics related to the economy and the bank to the extent possible. Dr. Carney's is more 'open' and forward looking; his challenges will give the Bank of England forward momentum. The reason for is that perhaps the Reserve Bank had so far been run mainly by Governor's who were the Ministry of Finance's choice and were not allowed much say in creating or visualizing a larger picture. Dr. Rajan had to change all that when he came onto the scene. The forward momentum would come once he had set right and overcome the challenges articulated by him.

This paper will now look at the political backdrop under which the two central banks are functioning.

3. The Significance of the Political Backdrops:

Needless to say, the two central banks are operating in vastly contrasting political and economic backdrops. We have already looked at the economic scenes in the earlier sections of this paper of the two countries. This section will look more at the political backdrop in which the two central banks function.

The Indian political scene in which the RBI operates is a throwback to the British colonial days. The command and control set up which then existed (pre and post-independence) and the consequent Hindu rate of growth of the sixties and seventies reflect this. The Ministry of Finance and the RBI have always had a somewhat uneasy relationship even though it works well when taken on the whole. Essentially the problem is one of growth (as desired by the Ministry) versus monetary discipline – the control of inflation, keeping the exchange rate in a stable position etc., as desired by the RBI. On the macro level, it is our view that the regulatory framework under which the banks operate in India will only strengthen. Harle, Havas and Samandari (2016) said that:

‘Regulation will continue to broaden and deepen While the magnitude and speed of regulatory change is unlikely to be uniform across countries, the future undoubtedly holds more regulation— both financial and nonfinancial—even for banks operating in emerging economies. Much of the impetus comes from public sentiment, which is ever less tolerant of bank failures and the use of public money to salvage them. Most parts of the prudential regulatory framework devised to prevent a repetition of the 2008 financial crisis are now in place in financial markets in developed economies. But the future of internal bank models for the calculation of regulatory capital, as well as the potential use of a standardized approach as a floor (Basel IV), is still being decided. The proposed changes could have substantial implications, especially for low-risk portfolios such as mortgages or high-quality corporate loans.

Governments are exerting regulatory pressure in other forms, too. Increasingly, banks are being required to assist in crackdowns on illegal and unethical financial transactions by detecting signs of money laundering, sanctions busting, fraud, and the financing of terrorism, and to facilitate the collection of taxes. Governments are also demanding that their banks comply with national regulatory standards wherever they operate in the world. Banks operating abroad must already adhere to US regulations concerning bribery, fraud, and tax collection, for example. Regulations relating to employment practices, environmental standards, and financial inclusion could eventually be applied in the same way’.

If we look at the scene in the United Kingdom, there is a vast difference in the political climate in which it is operating. It is stable when compared to India and the Bank of England is a much older entity than the RBI. To put it in perspective, the Bank of England was incorporated by act of Parliament in 1694 with the immediate purpose of raising funds to allow the English government to wage war against France in the Low Countries (see Grand Alliance, War of the). A royal charter allowed the bank to operate as a joint-stock bank with limited liability. No other joint-stock banks were permitted in England and Wales until 1826. This special status and its position as the government’s banker gave the bank considerable competitive advantages.

Because of the fact that it is functioning in a highly democratic country, the Bank of England has the advantage of operating in a way that brooks very little political interference. Of course, there are many who will argue that the concept of central bank independence is something of a farce already and that politicians exert undue influence behind the scenes. One problem is patronage. George Osborne hand-picked Mark Carney; President Barack Obama nominated Janet Yellen to be head of the US Federal Reserve; Shinzo Abe installed monetary aggressor Haruhiko Kuroda at the Bank of Japan. Tony Blair’s early days in office was marked by the independence he gave the Bank of England.

This paper however, is not about the importance of the political climate in which the two central banks operate, though it is an important off-shoot of what is being discussed. The important issues are contained in the various sections of this paper and forms an integral part of it.

4. Conclusions

And finally, the paper will conclude by raising the question asked at the beginning of this paper - is it easier to be the Governor of the central bank of a developed or developing economy? It would be tempting but naïve to say that the former would be an easier role. According to us, both roles are equally complex and it is perhaps more exciting to be working in a developing economy. The problems which this role has is mitigated by the satisfaction of putting in place corrective measures and watching the economy grow and stabilize. Both the jobs are exceedingly complex, but being the governor of a central bank in a developed economy does not *ipso facto* mean an easier life; the responsibilities inherent in the job are both daunting and challenging.

This paper will now detail how the points made in the foregoing pages should be discussed in the ambience of a classroom.

Teaching Note

Summary

This teaching case examines the roles of the central banks in a developed and a developing economy (the Bank of England and the Reserve Bank of India). It is obvious that though the roles of both the central banks are essentially the same, the economies in which they function will cause their priorities to be different in terms of their strategic and operational approaches. The case therefore looks at the different economies and political milieus in which the two banks function. The case does this by analyzing the differences in the perspectives of the Reserve Bank of India and the Bank of England and also delves into the reasons behind these differences. It raises the question whether it is easier to be the head of a central bank in a developed or developing economy, (based on Dr. D. Subbarao's comment that the circumstances dictate how the Governor performs his functions). This is not an easy question to answer and the case, with the help of the various arguments, helps the reader to figure this out based on his or her own perception of the challenges each of the central banks face. Central banks occupy a unique space in their national governments and in the global economy. The study of central banking however, has too often been dominated by an abstract theoretical approach that fails to grasp central banks' institutional nuances.

Courses and Levels

The paper's focus is on the responsibilities and functions of a central bank in a developed and a developing economy. It is meant to improve the students understanding of several important issues relating to how the central banks function in different environments. For example, a developing country like India has to undertake massive development plans and programs for accelerating the pace of development. The government requires a vast amount of finance for this purpose, for which the country is to rely on the method of deficit financing (i.e., the issue of new paper-notes) in addition to using other methods. The banking sector is to provide adequate finance for this purpose. The central bank, being the sole note-issuing authority can assist the government by expanding the supply of currency to enable the government to finance its massive plan outlays. These are not germane to a central bank in a developed economy; the three main responsibilities for the Bank of England is keeping a lid on inflation, ensuring the entire banking system does not run into the sand, and making sure individual banks do not collapse, landing the taxpayers with a huge bill for bailing them out.

The points made in the paper are meant to be taken up ideally at the post graduate level, in a class for MBA or post graduate students in management, specifically for students specializing in banking and finance. Ideally, the students analyzing this paper should have a minimum of three years' work experience in order to fully understand its multi layered nuances.

Teaching Objectives:

The points made in this paper will help students to improve their understanding of several important issues relating to how central banks function. Specifically it will help them to:

- Analyze the challenges which the central banks face when functioning in a developed and a developing economy.
- Evaluate the different ways in which these banks have to align their priorities so that they are in tandem with the economies in which they are functioning.
- Plan and organize priorities and infer how to be able to react to potentially dangerous issues which can jeopardize the banking system in the country.
- Interpret and understand what is happening in the two types of economies insofar as they affect banks.

Discussion Questions and Answers:

The paper is ideal to be analyzed in an MBA class of around two and half hours duration. The paper provides scope for the discussion of multiple topics with the focus being on central banking in developed and developing economies. Ideally, the students should have at least three years of work experience in order to understand the nuances of the case. The instructor should ask the students to come prepared to specifically answer the following discussion questions:

1. What do you feel will be the job profile of a Governor of a central bank, irrespective of whether he or she is operating in a developed or developing economy?

The job profile released by the Bank of England when they were looking for a Governor is applicable to the heads of both types of central banks. The profile said that "The successful candidate will have experience of working in, or with, a central bank or similar institution; or will have worked at the most senior level in a major bank or other financial institution.

"He or she will demonstrate strong leadership, management and policy skills; will have an advanced understanding of financial markets and good economic knowledge.

"He or she will be a strong communicator, have good interpersonal skills and will be a person of undisputed integrity and standing."

He will also need a particularly thick skin, if only to withstand the type of blunt questioning that was directed towards predecessor Sir Mervyn King by members of the Treasury Committee during the banking crisis. In India, this last point will be segued into having the ability to deal successfully with the pressures from the Ministry of Finance.

2. Could the Governor be able to function effectively if he or she did not have the ability to pick up cues from the external environment, though the functional skills were there?

The ability to anticipate and change priorities is important in this role. It is therefore necessary that the Governor should be able to read patterns in the economy and the banking sector, and frame new policies or modify existing ones to ensure that matters went ahead without interruptions. An example where this was not done could be seen in India, where the public sector banks became saddled with a large amount of non-performing assets, because the central bank did not intervene in time to make them clean their balance sheets. As a consequence, many of these banks showed losses because of the large provision which they had to make without further delay.

3. What kind of pressures can the Governor of the central bank in India (to take an example of a developing economy) expect to face from the Government?

The priorities of the Government and the central bank need not necessarily go hand in hand. Typically, the government would like to see a fall in the price of capital and interest rates to come down. This will encourage borrowing and enable businesses to expand, leading to more jobs being created. The central bank on the other hand, has to be careful that inflation does not shoot up and so would like to keep interest rates high. This can lead to a mismatch in the priorities of the government and the central bank.

4. The Governor of a central bank has one of the most important jobs going. Why is this seemingly simple statement of importance?

Banks are the custodians of the public's money and their role in protecting it is vital. The instructor should focus on this point. The collapse of a bank has repercussions more than the collapse of any other type of company as it affects the society as a whole. The network externalities – its linkages to the external world – are much stronger for a bank. This is why the role of the Governor is of paramount importance.

5. What should happen to the Governor's job if the government forced and put in place an unwelcome policy (for the central bank) on the economy?

The government, in the ultimate analysis, has every right to do this. The central bank has to follow their wishes as happened recently in India, when 87% of the currency was demonetized overnight. The central bank was against this, and had said so in a note they had sent to the government. But the government went ahead and demonetized the currency and did not even ensure that the replacement currency was printed. This led to enormous hardships for the public as banks and ATMs went short of currency. As one Governor said if there is no meeting point then it is better for the Governor to resign and leave.

6. Is the central bank in any way responsible if a major fraud takes place in a bank?

To the extent that the central bank is meant to audit the banks periodically, the answer is yes. However, the Governor of the central bank in India indicated (when one of the largest bank frauds came to light), it is not physically possible for the central bank's auditors to audit every branch of every bank in India. He indicated that the responsibility lay with the board of the bank where the fraud occurred. This question is, by its very nature, open to debate and an in depth discussion can be the outcome.

Teaching Plan

Alternative 1

Stage 1 - The instructor should begin the class asking a general question as to whether anyone in the class has an understanding of the functioning of a central bank. He or she can then delve deeper into the subject by opening up with leading questions such as "what would you do if you were in the place of the Governor of the central bank in India when the demonetizing took place? The recent cases of banks being involved in fixing the LIBOR and money laundering scandals (to name two) should form a backdrop to these discussions.

Stage 2 - Preferably after the initial questions are asked, the class should be asked to form groups of four to five individuals and discuss the paper in detail and identify the main issues raised. This should be for at least one hour.

Stage 3 - They should then make presentations which should include the issues identified. Active class participation should be encouraged by the instructor so that the two and a half hours are profitably utilized.

Alternative 2

The instructor can make the entire class discussion driven, with him or her acting as the facilitator. If so, the recommended balance for analyses is as follows:

1. Introduction to the case – 30 minutes
2. Discussion on having watertight computerized systems – 20 minutes
3. Corporate governance issues which are highlighted by the case – 45 minutes
4. Possible solutions – 45 minutes
5. Wrap Up – 10 minutes

The foregoing teaching plan will be ideal to bring out the value of the points made in the paper.

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