



ZCAS University

BFF 2301 MONETARY AND FINANCIAL SYSTEM

FINAL EXAMINATION

30th MAY 2024

THURSDAY

08: 30 – 11:30

TIME ALLOWED: THREE HOURS (plus 5 minutes to read through the paper)

INSTRUCTIONS:

1. Section A: this question is **compulsory** and must be attempted.
2. Sections B: Answer Three (3) questions from this section.
3. This question paper carries a total of **100 marks**.
4. Candidates must **not turn this page** until the invigilator tells them to do so.

SECTION A: Question 1 is compulsory and must be attempted.

Question 1

The Zimbabwean economic rift Case by Mike Mzondiwa, 2018

Following the government's confiscation of farms in 2000, which were subsequently redistributed to supporters of Robert Mugabe, the country's president, Zimbabwe experienced a drastic decline in agricultural output and tax revenue. Consequently, the government found itself in a situation where expenditures far surpassed revenues. While one option to cover these expenses was through raising taxes, the weakened state of the economy made this approach both difficult and politically unpopular. Borrowing from the public was also not viable due to widespread distrust of the government. Thus, the only remaining recourse was resorting to the printing press. The government began to finance its spending by simply increasing the money supply, leading to a rapid escalation in inflation.

In line with the quantity theory, the surge in the money supply triggered a sharp rise in prices. In a futile attempt to curb inflation, the Reserve Bank of Zimbabwe prohibited price increases on many goods in February 2007. However, history has shown that such measures are ineffective when the central bank continues to inject money into the economy. By March 2007, the inflation rate had soared to a staggering 1,500%. By 2008, the official inflation rate surpassed 2 million percent, with unofficial estimates exceeding 10 million percent. In July 2008, the central bank issued banknotes with denominations as high as \$100 trillion, yet these bills held little value in purchasing power, exemplifying the severity of the hyperinflation.

In an attempt to mitigate the crisis, the Zimbabwean government permitted the use of foreign currencies such as the U.S. dollar for all transactions in 2009. However, the damage inflicted by hyperinflation had already taken its toll, plunging an already impoverished nation into further economic turmoil. Hyperinflations, as observed, do not subside naturally but require intervention through stabilization programs. Such crises not only disrupt economic stability but also have profound effects on the money supply, as demonstrated by Zimbabwe's case. Additionally, the theory of liquidity preference is pertinent, as individuals tend to prefer holding assets with stable values during periods of high inflation, further exacerbating the liquidity crisis and economic instability. In addition to the financial market, monetary, and financial systems, several other aspects of the economy and society could be impacted by the scenario described in the Zimbabwean. The drastic decline in agricultural output not only affects tax revenue but also impacts food security, employment in the agricultural sector, and overall economic production.

Reduced agricultural output can lead to shortages of essential goods, exacerbating the inflationary pressures.

This situation also severe consequences for the population's standard of living, particularly for vulnerable groups such as the poor and elderly. Rising prices erode purchasing power, making basic necessities unaffordable for many, and potentially leading to increased poverty and social unrest. The economic turmoil and hyperinflation undermined political stability, eroded trust in government institutions and potentially leading to civil unrest or regime change. The redistribution of farms and subsequent economic mismanagement may exacerbate existing political tensions and create further instability. The situation further, strained diplomatic relations with other countries, particularly those providing financial aid or investment. It was clear that Zimbabwe was headed for a crisis other countries such as US and Britain imposed sanctions such as withholding assistance in response to economic mismanagement or human rights abuses, further isolating Zimbabwe from the global community. Finally, hyperinflation had a profound psychological effects on the population, eroding confidence in the national currency and financial system. Individuals may resort to hoarding goods or foreign currencies, exacerbating shortages and liquidity problems.

Required:

- i. Discuss the available alternatives to monetary policy mechanism, that can be employed to address the underlying causes of hyperinflation. (3marks)
- ii. Discuss the challenges faced by financial institutions in managing liquidity and credit risks during periods of extreme economic instability. (3marks)
- iii. Assess the broader economic consequences of hyperinflation on Zimbabwe's economy, including its effects on employment, income distribution, and social welfare. (8marks)
- iv. Using the Liquidity preference, discuss the long-term implications of hyperinflation on economic recovery and development (8marks)
- v. In times of the rising inflation, central banks across the selected countries are often found to be generally vigilant, and take quick and appropriate policy actions, although the scope and effectiveness of these actions vary. Discuss this statement in the context of the case above (8marks)

(Total =40marks)

SECTION B: Attempt any THREE questions in this section.

Question 2

The collapse of Barings, a revered British bank with over a century of history, serves as a cautionary tale illustrating the devastating consequences of the principal-agent problem exacerbated by a rogue trader. This moral tragedy unfolded when Nick Leeson, newly appointed head clerk of Barings Bank's Singapore branch in 1992, began speculative trading on the Nikkei, the Japanese equivalent of the Dow Jones stock index. Leeson's risky endeavours swiftly led to substantial losses, initially amounting to \$3 million, which he concealed from his superiors by clandestinely channelling the losses into a covert account. Exploiting lapses in internal controls within the firm, Leeson managed to maintain the illusion of profitability, effectively masking his mounting losses from scrutiny. This deception underscored the critical importance of segregating roles within financial institutions, akin to the precautionary measures employed in cash-based businesses to mitigate the risk of fraud.

Despite indications of his faltering performance, the mismanagement persisted, exacerbated by Barings' failure to uphold fundamental principles of operational separation between front and backroom functions. As losses burgeoned, exceeding \$250 million by late 1994, Leeson's desperation intensified. The catastrophic earthquake in Kobe, Japan, on January 17, 1995, precipitated further losses, with \$75 million evaporating from his accounts in a single day. By the week's end, his losses had surpassed \$150 million.

The escalating financial turmoil propelled Leeson towards increasingly audacious risk-taking, driven by the prospect of offsetting his losses and salvaging his professional reputation. With mounting debts and dwindling prospects, Leeson abruptly absconded from Singapore after incurring an additional loss of \$250 million following a market downturn on February 23. His departure marked the culmination of a tumultuous period characterized by reckless trading and catastrophic financial losses. Leeson's tumultuous journey culminated in staggering losses totalling \$1.3 billion, effectively eroding Barings' capital reserves and precipitating the bank's collapse. In the aftermath, Leeson faced legal repercussions, eventually being convicted for his role in the financial debacle. Subsequently, Barings, once a stalwart of the financial industry, was sold for a nominal sum of £1, symbolizing the tragic demise of a venerable institution.

Required;

- i. Discuss the ramifications of bank failures to an individual bank (5marks)
- ii. Explain how a bank such as the Barings bank events would result in a systemic bank instability (5marks)

- iii. Identify and analyse the key components that affect money supply from bank failures (5marks)
- iv. What measures can the central bank put in place to ensure soundness, stability, and public confidence in the banking sector and how such can be achieved (5marks)

(Total=20marks)

Question 3

The Hawkish and Dovish Monetary Policy of the Central Banks by Gerald Hamuyayi, 16 May, 2024

A perfect three-pronged storm of economic challenges is brewing for central bankers. The Bank of Zambia is faced with a hat-trick of rising inflation, a depreciating currency, and an increasing overnight interbank lending rate. The economic headwinds pose a serious hurdle for central bankers, necessitating a hawkish policy stance to tame inflation and stabilise the currency. However, a widening divergence between the overnight interbank rate and the policy rate reveals a banking sector struggling with Kwacha shortages and liquidity crunches, complicating monetary policy decisions. At its second Monetary Policy Committee meeting, the Bank of Zambia (BoZ) raised the benchmark policy rate by 100 basis points to combat rising inflation. Zambia's inflation soared to 13.8% in April 2024, exceeding the bank's 6% to 8% target by a colossal 500 basis points at the very least, as both onshore and offshore inflation expectations rose. The drought crisis, which has affected over 7.5 million Zambians, has exacerbated the inflation surge, with both food and non-food prices rising.

In the first quarter of 2024, the Kwacha depreciated by 10.6% against the US dollar as demand outstripped supply. To mitigate the Kwacha's decline, the Bank of Zambia intervened in the foreign exchange market, supplying \$369 million to absorb the excess dollar demand and ease pressure on the currency. However, the dollarisation of the Zambian economy and existing inefficiencies in foreign exchange pricing, resulting from rate negotiations for large dollar transactions, have persistently distorted market efficiency. Developments in the overnight interbank market have been intriguing. Since the policy rate hike on February 14, from 11% to 12.5%, the interbank interest rate has averaged 18.63%, significantly higher than the benchmark 12.5%, representing a substantial 6.13% average premium charged in the market. Premiums higher than this level were last seen in 2014 and 2016, as illustrated in the 'Benchmark Policy Rate Vs. The Interbank Rates' chart. In response to a question from Financial Insight Zambia on liquidity conditions, BoZ Deputy Governor Chipimo said, "Monetary conditions are

significantly tighter than what would be implied by just looking at the policy rate; the rate should pull back within the corridor as the central bank readjusts its balance sheet."

Additionally, the chart indicates that policy rate hikes are associated with a sharp increase in the overnight interbank lending interest rate. Furthermore, the graph suggests that the Bank of Zambia has historically adopted a policy of reducing the policy rate when the interbank rate has exceeded the benchmark for a sustained period prior to the Monetary Policy Committee meeting. Given the unfavourable movements in inflation and the exchange rate, the central bank decided to maintain tighter liquidity conditions by raising the rate by 100 basis points. "We have determined that it's necessary to maintain current conditions to address the current challenges," the BoZ Deputy Governor added. Zambia's economy faces tough times as credit costs rise, and lending slows due to tighter liquidity and high interest rates. Like Panadol, a painkiller, the policy rate hike provides short-term relief from the Kwacha's depreciation, but sustaining stability requires economic growth, increased exports, and improved export quality through value addition - a challenging task amid the energy and food crises.

Required,

- i. Explain how the "Hawkish and Dovish" monetary policy approaches in the quest to achieve the objectives of the Central Bank. (7marks)
- ii. Using the Philips Curve concept, demonstrate how the level of production could be affected with an escalated rate of interest and price stability. (8marks)
- iii. Briefly discuss any five risks that arises that a premised on weak forex market instability in an economy like Zambia (5marks)

(Total =20marks)

Question 4

Ongoing discussions persist regarding the reinforcement of global financial stability, stemming from various instances of instability such as the 2008 global financial crisis, the European debt crisis of 2010-2012, and the COVID-19 pandemic. One central point of contention revolves around finding the right balance between regulatory measures and market dynamics to foster financial stability. While some advocate for lighter regulation to spur innovation and economic expansion, others advocate for robust regulation to mitigate systemic risks and safeguard consumers. Another area of debate concerns the management of institutions deemed "too-big-to-fail," with suggestions ranging from breaking them up to subjecting them to stricter oversight.

Moreover, there is ongoing discourse on enhancing international cooperation to prevent financial contagion, albeit with skepticism regarding the feasibility given differing national interests and regulatory frameworks. Additionally, the efficacy and potential unintended consequences of macroprudential policies in promoting stability are subject to debate. Likewise, there are differing views on the role of central banks, with some arguing for a narrower focus on monetary policy and others advocating for a broader mandate encompassing financial stability. These discussions remain pivotal for maintaining the soundness of financial systems globally. Conversely, opinions vary regarding the impact of excessive regulation on innovation and growth, with some cautioning against stifling effects while others stress the need for stringent regulations to protect consumers, as noted by Barbara Casu in 2015.

Required

- i. In the context of the preceding article, examine the assertion that effective monetary management necessitates a balanced integration of regulatory measures, market forces, and supervisory oversight to uphold financial stability. (7marks)
- ii. Evaluate the contrasting perspectives presented in the statement: "Some argue that excessive regulation can stifle innovation and economic growth, while others believe that strong regulation is necessary to prevent systemic risk and protect consumers. (7marks)
- iii. Explain the major steps government central banks need to take in order to ensure there is stability of the financial system (6marks)

(Total =20marks)

Question 5

The Central bank of any country is a national bank responsible for the implementation of the monetary and fiscal policy of a country. This means that the bank is a vehicle through which the government accomplishes many of its economic objectives and deliver development to its citizens.

- a) Discuss any four key components of the fiscal policy tools of the National economic policy and further highlight what these tools were designed to accomplish. (8 marks)
- i) Real money demand and the real money supply is functions of the real interest rate. Real money demand is always linked to the fixed real income and expected inflation. The real money supply is equal to the nominal amount of M1, denoted M_0 , divided by the fixed aggregate price

level, P_0 . There are varying factors that lead to increased demand for money supply. Briefly discuss any six. (8marks)

ii) Given that the currency and banks holding equal amounts of money, and a half of the deposits as statutory reserves and that the base currency is K1, 600,000

a) Calculate the M, showing all your workings and briefly explain the implication of your answer to the general economy and the Central bank's immediate response against your answer. (4 marks)

(Total =20marks)

END OF EXAM