Week 3 (Case Study 1)

DEMAND & SUPPLY: Wii Console

INTRODUCTION
The Wii is a video game console made by Nintendo. It seems that this is the one of the most successful consoles made by Nintendo to date, and it is the successor to the Gamecube. The Wii is Nintendo's fifth home video game console. The Wii is a very interesting console, having WiFi online capabilities, wireless controllers, and blue-tooth.

BACKGROUND
The Wii is different than other video game consoles launched by Nintendo in the past due to many reasons, but the main one is the controller. The controller has revolutionized gaming. The controller uses a miniature gyroscope inside of it to detect its orientation, and a sensor bar attached to the Wii console to detect where it is in 3D space. The controller can be used much like a mouse, as things on the screen can be manipulated simply by pointing and pressing a button, but instead of moving the controller on a flat surface, a person can simply point the controller at the TV much like a TV remote. By this merit, the controller has become simple, and it gives game developers something new to toy with. Nintendo packaged a game with the system called Wii Sports, which features 5 different minigames: baseball, boxing, bowling, tennis, and golf, each having the player using the controller as if they were playing the actual game. For example, you would swing the remote as if it was a tennis racket in tennis.

Launch
On September 14, 2006, Nintendo released information for Japan, North and South America, Australia, Asia and Europe, including dates, prices, and projected unit distribution numbers. It was announced that the majority of the 2006 shipments would be allotted to the Americas. The media hype began immediately. The Wii was launched in the United States at $249.99 on November 19, 2006, two days after the PS3 was released in North America. It was later launched in the United Kingdom on December 8, 2006 at £179. The Wii was launched in South Korea on April 26, 2008 and in Taiwan on July 12, 2008.

Sales
The UK suffered a widespread shortage of console units as many high-street and online stores were unable to fulfil all pre-orders by

The Wii "has been a sell-out virtually everywhere in America," Fils-Aime said in an interview. "We understand the frustration of consumers...I can tell you that we expect no slowdown after the first of the year. We want to say that if you could possibly hold out just a little longer, there will be more product in January."

Read more: http://news.cnet.com/nintendo-wii-supply-finally-catches-up-to-demand/#ixzz1UdYsVIZn
Christmas 2006. Some UK stores still had a shortage of consoles by March of the next year.

The market lead is largest in the Japanese market, where it currently leads in total sales, having outsold Playstation 3 and Xbox 360 by factors of 2:1 to 6:1 nearly every week from launch until November 2007. In 2008, the Wii was the best-selling home console in Japan with 2,908,342 units sold.

In Australia, the Wii exceeded the record set by the Xbox 360 to become the fastest-selling game console in Australian history.

In the North American market lifetime-to-date sales for the Wii have reached 30 million in the North American market alone since the console's launch in November 2006. Demand still outpaced supply in the United States as of June 2007. In October 2008, Nintendo announced that between October and December 2008 the Wii would have its North American supplies increased considerably from 2007's levels, while producing 2.4 million Wii units a month worldwide, compared to 1.6 million per month in 2007. Unfortunately for consumers, it took until March 2009 (and 48 million units) to make Wii available to those who want to walk into a retail store and pick one up.

Profit
While Microsoft and Sony have experienced losses producing their consoles in the hopes of making a long-term profit on software sales, Nintendo reportedly has optimized production costs to obtain a significant profit margin with each Wii unit sold. Nintendo reported on May 7, 2009 increases in operating profits for its fiscal year (April 1, 2008 – March 31, 2009), and a rise in sales—setting record earnings compared to the previous year.

Price drop
On September 23, 2009, Nintendo announced its first price drops for the console. In Japan, the price dropped from ¥25,000 to ¥20,000, effective October 1, 2009. In the United States, the price was reduced to $199.99, effective September 27, 2009. In Europe (excepting non-eurozone nations), the price of a Wii console dropped to €199 from €249.

Nintendo sold more than three million Wii consoles in the U.S. in December 2009, setting a regional record for the month and ending 9 months of declining sales, as a result of the price cut and software releases such as New Super Mario Bros. Wii. As of the end of that month, the Wii was the best-selling home video game console produced by Nintendo with sales of over 67 million units, surpassing that of the original Nintendo Entertainment System. As of June 30, 2011, Nintendo has sold 87.57 million Wii consoles.
Questions
1. Would the demand for the Wii console be relatively inelastic or relatively elastic? State why.
2. Would the supply for the Wii console be relatively inelastic or relatively elastic? State why.
3. Draw the demand and supply curves as you have described them.
4. Was the severe shortage for over two years an old marketing ploy called intentional scarcity, in which a company purposely keeps its hot product in short supply to build buzz. Or was it simply bad planning on Nintendo’s part? What did this mean for households? What were the implications for Nintendo?
5. Can you suggest a reason why Nintendo dropped the price of the Wii Console in late 2009. How would you expect this to affect revenues?
Week 3 (Case Study 2)

THE BANKING CRISIS IN IRELAND AND THE US

INTRODUCTION
A number of major international banks and numerous banks of lesser size in developed countries were crippled in the aftermath of the global financial crisis. Normal lending activity was impeded, while capital markets are unable or unwilling to provide the banks with sufficient equity capital to pull them out of their dire straits. Government responses have greatly differed, from straight nationalization to providing capital support in forms entailing varying degrees of shareholder dilution and intervention in management, to guaranteeing banks against potential losses on certain asset classes. In the main, the problems have been rolled over rather than resolved, despite increasing capital injections and risk exposure of governments, and there has been a great deal of uncertainty as to the real situation of banks which has impeded a return to normal functioning of the interbank and credit markets.

BACKGROUND
In early 2007, the first major warning of a crisis came in the form of HSBC making a significant loss from their ill-timed 2002 acquisition of U.S. subprime lender Household International. It was easy for policy makers to convince themselves and the wider public that the problem was contained to subprime. However, by late 2007, these localized signs of distress turned into a global event, with losses spreading to banks in Europe (such as U.K. mortgage lender Northern Rock), and distress was no longer limited to financial institutions with exposure to the U.S. subprime mortgage market. The credit crisis resulted in mutual distrust amongst large banks operating in the global market for interbank loans which meant credit was hard to come by for many banks. While the emergence of the US crisis was evident from mid-2007 as mortgage defaults began to gather pace, the Irish crisis did not manifest itself until a year later. Ireland did not feel the full force of the turmoil until the collapse of Lehman Brothers sent shock waves through international financial markets.

One of the main differences between the US and Irish crises is the troubled assets behind them. The US credit-liquidity crisis followed a period of rapid financial innovation, during which many complex new products were introduced. The risk profile of the interlinked US financial markets were not properly understood by regulators and participants. In contrast, the Irish crisis evolved from a traditional

**TIMELINE OF FINANCIAL CRISIS**

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>Feb ’07</td>
<td>HSBC losses</td>
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<td>Oct ’07</td>
<td>Merrill Lynch losses</td>
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<tr>
<td>Mar ’08</td>
<td>Collapse of Bear Stearns</td>
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<tr>
<td>Sept ’08</td>
<td>Lehman Brothers bankrupt</td>
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<td>Sept ’08</td>
<td>Irish Government Guarantee</td>
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<tr>
<td>Sept ’08</td>
<td>Fannie Mae and Freddie Mac</td>
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<td>Sept ’08</td>
<td>AIG Bailout</td>
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<td>Oct ’08</td>
<td>TARP established</td>
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<td>CPP</td>
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<td>Jan ’09</td>
<td>Anglo Nationalized</td>
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<td>Jan ’09</td>
<td>Recapitalization of AIB, Bol</td>
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<td>April ’09</td>
<td>NAMA</td>
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<td>Nov ’10</td>
<td>EU/IMF deal</td>
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credit boom and bust. Irish domestic financial institutions availed of cheap short-term funds using Euro-denominated bonds and interbank borrowing from Euro-area banks. Domestic property developers took advantage of the availability of excessive credit leading to the Irish banks' loan books being poorly diversified.

As Connor (2010) pointed out there appears to be four common “deep” causal factors in the periods leading up to both the US and the Irish crisis.

- **Irrational Exuberance** – In both countries this irrational exuberance grew during unusually benign economic climates, the Great Moderation period in the USA and the Celtic Tiger period in Ireland leading to asset price bubbles.
- **Capital Bonanza** – Very low real borrowing rates sustained by international capital inflows into both countries.
- **Regulatory Impudence in response to political pressure by special interests** (but different types of political pressures serving different special interests in the two countries).
- **Moral Hazard behaviour by agents in the financial sector and (for Ireland) in the property development industry.**

**THEORIES**

Irrational Exuberance
The role of the regulator
Systemic Banking Crisis

**POLICY RESPONSES 2007-2009**

The policy responses during the 2007-2009 crises were broadly similar to those used in the past. First, liquidity pressures emanating from the subprime crisis were contained through liquidity support and guarantees on bank liabilities. Then on the resolution side, a wide array of instruments was used, including asset purchases, asset guarantees, and equity injections.

In the United States, the main instrument of direct support to banks by the U.S. Treasury was within the Troubled Asset Relief Program. TARP was established at the peak of the crisis in the fall of 2008. By October 2008, nine major banks received a capital injection of $145 billion, under the Capital Purchase Program (CPP). Eliminating the idea of purchasing troubled assets with a refocus towards buying equity. Citigroup and Bank of America received a second round of government assistance, under another program of the TARP, in November 2008 and January 2009. TARP eventually included 13 programs implemented by the U.S. Treasury. The Treasury allocated $250 billion for CPP, which represents a large part of the total allocation of government funds under TARP ($700 billion). Of the $250 billion allocated, approximately $205 billion was distributed to 707 institutions, largely toward the end of 2008 and the beginning of 2009, with the last disbursements occurring Dec. 29, 2009.

Meanwhile in Ireland, the Irish Government guarantees €440bn worth of liabilities for six Irish financial institutions on 30 September 2008. The nationalisation of Anglo Irish Bank in January 2009 was followed by the State’s first cash injections of €3.5bn into both AIB and Bank of
Ireland. Unfortunately this was only the beginning. When the National Asset Management Agency was established in April's 2009 the extent of bank's losses increased. All the main institutions required more state capital, except Irish Life and Permanent. The cost of rescuing the Irish banks had a major impact on Ireland's credit rating, forcing an EU/IMF bailout worth €85 billion (€67.5 billion from external sources) in November 2010.

**Questions;**

1. What is a subprime mortgage? How did the Fed add to the problem? Who do you think was most at fault?
2. What marked the beginning of the crisis in the US? Was it when Bear Stearns collapsed or when Lehman Brothers went bankrupt?
3. Explain what you think is meant by the term 'mutual distrust'. What impact did it have on the credit market?
4. Was the Irish crisis precipitated by the US crisis? Would the Irish Banking Crisis have occurred if Lehmans Brothers hadn’t failed? Explain your answer.
5. Compare and contrast the similarities and differences between TARP in the US and NAMA in Ireland.
6. What is the lesson to be learned from this crisis, and what kind of precautions should be taken?

**Further Reading/ references;**


**Week 4 (Case Study 1)**

**THE DOT - COM BUBBLE 1995 – 2001**

**Introduction**

Stock market bubbles and subsequent crashes are a regular occurrence in history and many have similar characteristics. Charles Kindleberger 1991 (cited in Komaroni 2006 p.30) described a bubble as being “…defined loosely as a sharp rise in price of an asset or a range of assets in a continuous process, with the initial rise generating expectations of further rises and attracting new buyers…The rise is usually followed by reverse expectations and a sharp decline in price often resulting in a financial crisis.” However it is usually with hindsight that such occurrences can be called a bubble and explained in full.

**BACKGROUND**

In the period 1995–2001 hundreds of internet companies entered the market. These companies, referred to as dot-com’s, were financed by a combination of venture capital and the earnings from their initial public offering (IPO). The dot-com phenomenon was more of a novelty and seen as the place to be. Investment managers who were reluctant to invest in this market were being questioned by their clients as to why they were not jumping on the dot-com bandwagon. Surely such a new technologically advanced phenomenon could only rise and start the dawn of the ‘new economy’.

This period is a classic example of optimistic investors overruling pessimistic investors, thus allowing the stock prices rise to ridiculous unsubstantiated prices. The market was limited in its ability to bring equilibrium to the stock prices in the form of short selling restrictions due to lockup agreements. This led to optimistic investors and momentum traders dominating the market for internet stocks, pushing out the pessimistic investors, who had a practical view of the overvalued prices. The price had nowhere to go but up. In 2000 many of the lockups expired which brought more new investors into the market. These investors brought with them realistic views of the internet market which ultimately pushed down the price levels and led somewhat to the collapse of the bubble.

Short selling occurs when an investor believes that the share price is overvalued and borrows the security selling it at its high price in the hope of buying it back when the price drops thus making a profit. Someone who is long on a security profits when the prices rise. Although investors knew the stocks were overvalued, an investor

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<th>MAJOR STOCKMARKET CRASHES</th>
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<td>2001</td>
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<td>2007</td>
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“Those who cannot remember the past are condemned to repeat it.”

George Santayana
going short on a dot-com company would have had to wait a long time for prices to come down enough to make a profit, so many stood on the side lines waiting for the dot-com bubble to implode. It was a matter of timing in order to make any profit.

Alan Greenspan, then chairman of the Federal Reserve, described the behaviour of stock market investors as being taken over by an ‘irrational exuberance’. It is clear that the market was acting irrationally when one looks to the accounting losses of some of the internet based companies e.g. eToys stock was valued at $8 billion in 1999 while its sales and net losses the previous year were $30 million and $28.6 million respectively. This is in stark contrast to the long established Toys ‘R’ Us who in the same period had stocks valued at $6 million with revenue of $11.2 billion and profits of $346 million.

This leads to the question of how the stock prices could have been so overvalued. Stephen H. Penman (2003 p.81) states that “poor accounting feeds speculative beliefs”. Misleading accounting practises led many to believe that dot-com companies were operating legitimately. Many internet based companies stressed that earnings were not as important as creating a customer base. They valued their stock by the amount of ‘clicks’ that their page got insisting that this was more important that initial revenue.

Such a new technology was not in a position to be argued with. The belief was that the increase in customer awareness of an internet based company would lead to future profits. But by 2000 many of the companies had run out of capital and had made no profits. The momentum surrounding dot-com companies had faded and further capital was nowhere to be found. The U.S. was also experiencing general political and economic optimism during this time. The Federal Reserve had reduced its interest rate in 1995 and did not raise it again until 1999, which allowed a greater flow of capital in the economy.

The years 1998 to 2001 did see the start-up of many successful internet based companies but the market was tarnished by those companies that survived off borrowed money and were not interested in establishing a business. Amazon.com and Google are two of the best known examples of companies which took a realistic viewpoint with their business plan and advancing their technologies. When the crash came the companies were in strong enough positions to weather the storm and continue.

*Lockup agreement* is a legally binding contract between underwriters and insiders of a company which prohibits these individuals from selling any shares of their stocks for a given period of time, usually 6 months.

Further Reading/ references;


QUESTIONS:

1. Can you see any similarities in the Dot-Com case study and the housing bubble recently experienced in Ireland?

2. Explain in your own terms how the actions of investors affect the price of stocks. Use examples of a stock market crash mentioned in the timeline above.

3. In what way did the low interest rate set by the Federal Reserve affect the stock market during this period? How were companies which made almost no profit able to continue to operate?

4. Explain the above quote from George Santayana in relation to market crashes. How can your understanding of the quote be used to avoid future bubbles/crashes occurring?

5. Compare and contrast the Dot-Com bubble to the Dutch tulip speculation in 1634 (http://en.wikisource.org/wiki/The_Tulip_Mania) Can different commodities almost 400 years apart have any similarities? What does this suggest to you?
Week 4 (Case Study 2)

THE WÖRGl EXPERIMENT: JULY 1932- SEPTEMBER 1932

INTRODUCTION

The great depression spread throughout the world in the 1930’s and brought with it severe unemployment, a dramatic drop in foreign trade and crop prices. The town of Wörgl, Austria had been just as badly hit, with many of its factories closing down. It was a town of 4,300 inhabitants with 1500 unemployed. And the town was slowly going bankrupt. The town mayor Michael Unterguggenberger was a keen follower of Silvio Gesell’s ‘free money theory’.

BACKGROUND

Gesell’s theory held that a form of local currency could prevent economic downturn which he believed was caused by the hoarding of money. With a percentage of depreciation on this new currency it would be of no advantage to hoard money as it would end up being worthless. This promotes the circulation of money which leads to an increase in general economic confidence.

In July 1932 Unterguggenberger proposed a plan to the town authorities where by they would issue a stamp scrip currency to the value of 32,000 Austrian shillings. These tickets, called ‘Wörgl Certified Compensation Bills’ would then decrease in value by one percent every month. At the end of the month people would have to buy a stamp in order to revalue their ticket to the new face value. This stamp was placed on the back of the ticket and the proceeds went to the poor relief fund. Money was utilised quickly, within the month, in order to avoid this devaluation fee.

Due to the first world war and the effects of the great depression the town of Wörgl was in need of repair. The town authorities could not carry these out due to a massive backlog of unpaid taxes. This along with the ever growing problem of unemployment led Unterguggenberger to a solution.

Source:
http://www.muenzenwoche.de/en/Archive/8/?id=17&type=a

The Wörgl Stamp Scrip 1932
Men who had long been unemployed and idle were hired to rebuild the streets and tend to the many neglected public works. They were paid with the local currency and the new notes were being circulated rapidly, households quickly used them in the shops to buy food and essential items. In turn the shopkeepers used this money to pay their taxes to the municipality who then paid their bills and debts. In the first month the new money had been circulated twenty times throughout the locality and 100,000 shillings worth of public works had been completed in the first four months.

The stamp scrip was used in conjunction with the national currency and city workers, the mayor included, received 50% of their wages in the new currency. The currency was accepted everywhere in the town except the post office and railroad which were run by the Austrian government. The scrips could be traded for Austrian currency at a redemption rate of 2%. The increase in business led to a decrease in unemployment while it tended to rise throughout the world in the same period due to the deepening depression.

The local currency was a great success and warranted the attention of many other areas interested in following their path. The French minister of finance visited Wörgl to view the local currency in action and economist Irving Fisher suggested similar schemes in the US. He believed in the power of Gesell’s scrip theory in avoiding economic downfall. Fisher wrote the book Stamp Scrip in 1933 outlining the advantages and benefits of stamp scrips.

In June 1933 Unterguggenberger held a meeting with representatives of 170 other towns throughout Austria. Soon the idea of local currency was spreading across the country. The Austrian National bank began to panic over the financial revolution fearing that local currencies would overtake their monopoly on printing national money. The National bank took legal action making it illegal use the Wörgl currency stating “…as a matter of record the borough of Wörgl has exceeded its powers, since the right to issue money in Austria is a privilege of the National Bank. This is stated in Art. 122 of the bylaws of the Austrian National Bank. Wörgl broke that law.” (Silviano 2006)

September 1933 saw the prohibition of Wörgl money, however the town appealed and the case was taken to the supreme court which denied the appeal and ended the local currency. Unemployment soon returned to 30% and poverty again ensued. Much of what the town of Wörgl had accomplished during its thirteen months of local currency was destroyed during WWII and the ‘experiment’ was put on the
backburner of history. However it is without doubt that this thirteen month period was an overwhelming success for both the inhabitants of Wörgl and the town itself.

QUESTIONS:

1. Using a definition for ‘money’, explain why it was possible for the town of Wörgl to introduce a local currency in conjunction with the national currency.

2. A depreciating currency discourages hoarding. Outline some of the reasons why people hoard money.

3. Do you believe that had the Wörgl experiment expanded, the effects of the Great Crash of 1929 would have been eroded in Austria? What are the reasons for your answers?

4. Using scrip money counteracted the deflationary policy of the government? Explain what government deflationary policy is.

5. Many other cases of scrip are distributed on a voluntary basis, why did the government decide to pay public sector wages in the local currency rather than allow people to voluntarily buy them? What did they stand to gain from doing this?

6. The success of the Wörgl case was the acceptance by the local government of the local currency to pay taxes, rents, wages etc. Show how this worked using a simple circular flow diagram.

7. Do you feel that an experiment of this kind would work in today’s economic climate? Explain your answer and any changes that could be made?

References & further readings:


QUANTITATIVE EASING: SWEDEN 1990s

INTRODUCTION
Located in Northern Europe, bordering the Baltic Sea, and between Finland and Norway, Sweden is a highly developed, stable democracy with a modern economy. A high-tech local economy and a comprehensive system of welfare benefits allow Sweden to enjoy one of the highest standards of living in the world. Sweden has one of the most globalised and competitive economies today.

BACKGROUND
In the early 1990s, Sweden went through a severe banking crisis. A major explanation of the Swedish banking crisis is ascribed to the post 1983 credit deregulation; however the roots of the crisis are found prior to this period. Mainly, the price boom was the result of several major shocks to fundamentals; high inflation, expansionary macro policy, and low real interest rates. The price boom was amplified by poor risk analysis in financial institutions and by the new borrowing opportunities due to competition unleashed by deregulation. The crisis that was to follow could be seen as the logical next step of the credit and asset price cycle initiated in the second half of the 1980s, but it was also affected by new shocks that occurred at the turn of the decade.

A massive government rescue operation was required to prevent the collapse of the financial system. Support amounting to 4% of GDP was given to the banks. Because the government guaranteed that all Swedish banks would meet their obligations in a timely manner, no bank actually failed during the crisis. The Swedish banking crisis was relatively quickly resolved. Within four years, the Swedish banking system as a whole showed positive profits again.

A “quantitative easing” policy can be referred to as simply shifting the instrument of monetary policy from the policy rate, which is the price of money, to the quantity of money provided. The policy objective remains unchanged.

During the 1990s Nordic banking crisis, the Riksbank (Swedish Central Bank) used large-scale increases in its balance sheet as a policy tool; the monetary base more than doubled during the Nordic banking crisis. In 1992, the Riksbank used its foreign currency reserves to provide liquidity support to banks. Because the government had guaranteed all bank debt, the Riksbank allowed banks to borrow freely through normal liquidity facilities.
The monetary base more than doubled within 10 months—from SEK 83.73 billion in August 1993 to SEK 208.26 billion in June 1994.

Late 1990s
When conditions stabilized, the monetary base decreased rapidly to SEK 81.11 billion by February 1997. Although inflation did not increase significantly during or after the monetary base expansion period, CPI inflation during 1994 was more than double the Riksbank’s 2% inflation target and inflation expectations increased modestly as the Riksbank expanded its balance sheet. As a result, even with the monetary base at elevated levels, the Riksbank gradually increased its policy target rate during 1994 and 1995. The inflation rate returned to a 2% pace by late 1995, slipping negatively the following year. Inflation expectations retreated below the Riksbank’s 2 percent inflation target to near 1.5 percent.

The graph below documents that even as the monetary base jumped from 1994 to late 1996, inflation did not follow suit, and in fact, remained flat before falling in 1996.

Ultimately, Swedish Quantitative Easing in the early 1990s was a risky procedure with uncertain effects that central banks avoid except when the conventional policy toolbox is empty. The QE, doubling the monetary base, did not lead to higher inflation once the public viewed the increase as temporary and expected the central bank to maintain a low-inflation policy.

**THEORIES**
- Unconventional Monetary Policy
- Inflation
- Central Bank Balance Sheet
- Real Interest Rate

**Further Reading/References:**
Questions:
1. What is credit deregulation? Explain using the case in Sweden. Can you think of another example?
2. The objective of monetary policy is usually set out by the central bank. What was the Swedish Central Bank’s policy objective at the time?
4. What is the monetary base? Explain in your words with 2 examples.
5. What do you think is meant by the author in the last paragraph “when the conventional policy toolbox is empty”?
6. What about the current crisis? Give your opinion on whether the ECB (or the Federal Bank) should print money? Explain why it might be easier for the Fed to print money?
CURRENCY CRISIS BRITAIN 1992

After the collapse of the Bretton Woods exchange rate system established in 1944, Europe’s parity was called into question. To further implement European monetary integration the ‘snake-in-the-tunnel’ system was introduced in 1972. Under this system the European currencies, the ‘snake’, were allowed to fluctuate within predetermined parameters against the US dollar the ‘tunnel’.

The European Monetary System (EMS) was created in 1979. Britain, under Margaret Thatcher, declined to join the European Exchange Rate Mechanism (ERM) although the new Chancellor of the Exchequer Nigel Lawson believed in a fixed exchange rate system and capped the pound sterling to the Deutschmark.

Mr Lawson admired the German economy and felt that shadowing the Deutschmark would help Britain’s competitiveness in Europe. However, as with the EMS, the German and British economies were not in sync as Europe was growing at a slower pace than Britain. Germany had an expansionary fiscal policy which required a tight monetary policy whereas Britain had to adopt a tight monetary policy without the fiscal expansion. This led to high rates of inflation as Britain struggled to keep £1 from exceeding 3DM.

In 1990 Britain finally joined the ERM with £1 to 2.95 DM. Under ERM rules the pound was to vary no more than 3% above or below its entry rate. However the Deutschmark continued to strengthen while Britain fell further into recession. The strength of sterling, due to the ERM rules, hit British exports hard. The British government pleaded with the Bundesbank to lower its interest rates but this was not going to happen as Germany was still recovering from the reunification of East Germany. This can also be seen in the Euro area with the European Central Bank raising interest rates despite slow growth rates in some member countries.

It was obvious that sterling could not compete with the Deutschmark and one speculator in particular noticed this. George Soros believed that sterling was highly overvalued and would soon collapse. He began short selling sterling. Demand for sterling dropped rapidly pushing sterling dangerously close to the lower band enforced under the ERM rules.

‘Before returning to the ERM we need to see changes to the fundamental factors…The following factors would need to be satisfied:

(i) The German economy needs to develop in a way so that the requirements of its monetary policy are more compatible with those of EMS partners.

(vi) The nature of the EMU needs to be clarified. Is it a ‘hard’ system acting as a precursor to EMU, or the fixed but adjustable system of the 1980’s? Is the former plausible? If the latter how does it cope with periodical realignments involving major currencies?

(HM Treasury, 1992)
Nigel Lamont, then Chancellor of the Exchequer, agreed with the Bank of England that in order to strengthen the sterling they would sell their foreign reserves in exchange for sterling. This had no effect on pushing sterling back up as the Bank of England were buying sterling in the millions while Soros and others were selling in the billions.

The Bank of England continued to buy sterling frantically, unaware of the extent to which they were being outpaced. This left the Bank of England with massive amounts of currency which was certain to be devalued.

Britain had no choice but to raise interest rates, first to 12% then to 15% in an attempt to attract investors but it was too late. The government realised it would be too costly, in the long run, to continue to artificially prop up sterling in order to counteract the drop in demand. On the 16th September 1992 Norman Lamont announced that Britain was to leave the EMU.

WHAT HAPPENED NEXT

Sterling was now on the free market and was allowed to depreciate below its lower band against the Deutschmark and has floated freely since while still trying to keep inflation in line with the rest of Europe.

September 16th 1992 became known as ‘Black Wednesday’ and although the incident ruined the reputation of Nigel Lamont and the Conservative government, it did not tarnish Britain’s reputation in the financial markets. The devaluation of sterling brought down Britain’s interest rate and inflation while achieving a rapid drop in unemployment. The growth rate of those countries which were forced to leave the EMU compared to those that stayed raised the question of why countries would want to stay in or join the EMU.

The exit of sterling from the ERM was the first of its kind for the European Monetary Union and put its future in doubt. However Europe learned from the crisis and relaxed its currency bands and ultimately, with the formation of the Euro currency used a fixed European rate for its members as opposed to pegging its currencies to the Deutschmark. In keeping exchange rates fixed and allowing free movement of capital all EMU members have no independent monetary policies.

"The costs, though significant, are dwarfed by the gain to the economy of really low inflation." 

Norman Lamont, 2005

Further Reading/ references;


QUESTIONS:

1. What are exchange rates? Watch the news (Bloomberg) or go to an exchange rate website (http://www.xe.com/currency/eur-euro) and find the exchange rate between the Euro and three main currencies. What do these rates tell you about the strength of the Euro?

2. Explain the terms ‘appreciate’ and ‘depreciate’ in terms of exchange rates. Can you pick out moments in the case study where the British pound appreciated or depreciated?

3. Briefly compare and contrast floating exchange rates and fixed exchange rates giving one example for each.

4. It is mentioned above that Bundesbank interest rates were too high for Britain to remain competitive. What is the connection with high interest rates and the rate of growth of an economy? Can you see any similarities within the Euro zone presently?

5. The author states that “Europe learned from the crisis”. Do you agree with this statement? What is your opinion on the Euro zone and its effectiveness today?
Week 6 (Case Study 1)

SAVINGS: SOUTH KOREA 1950 - 2000

A number of East-Asian nations have experienced significant economic growth, and the rapid nature of this growth rate has allowed them to be classified as Newly Industrialised Countries (NICs). South Korea is a prime example, and major NIC, since the 1960s.

BACKGROUND

Since World War II, South Korea has achieved an incredible record of growth of per annum GDP growth of well over 9% and integration into the high-tech modern world economy. An extremely competitive education system and a highly skilled and motivated workforce are two key factors driving this knowledge economy. In recent years, Korea’s economy moved away from the centrally planned, government-directed investment model toward a more market-oriented one.

Economists are concerned that South Korea’s economic growth potential has fallen because of a rapidly aging population and structural problems that are becoming increasingly apparent.

1950s

After World War II, South Korean policymakers set upon stimulating economic growth by promoting indigenous industrial firms, following the example of many other post-World War II developing countries. The government selected firms in targeted industries and gave them privileges to buy foreign currencies and to borrow funds from banks at preferential rates. It also erected tariff barriers and imposed a prohibition on manufacturing imports, hoping that the protection would give domestic firms a chance to improve productivity through learning-by-doing and importing advanced technologies. However, unproductive profit-seeking activities such as bribing were common which caused efficiency to decrease and living standards to stagnate, providing a background to the collapse of the First Republic in April 1960. With living standards

1960s

In the early 1960s, as a result of rapid industrialization the government adopted of an outward-looking strategy. This strategy was particularly well suited to that time because of South Korea's poor natural resource endowment, low savings rate, and tiny domestic market. In the 1960s, the Koreans saved about 10 percent of their gross national product. In 1965, the national saving ratio was 13.2%. The reason Koreans saved "so little" during a period of rapid

“The change in the national saving rate is so drastic that only 15 years after a paper entitled “Why do Koreans save so ‘little’?” was written by Williamson (1979), another paper entitled “Why did Koreans save so ‘little’ and why do they now save so ‘much’?” was written by Kang (1994).”(Park, 2005:395)

THEORIES

Savings & Investment Growth Model Life-cycle hypothesis Demographic Trends Current Account
capital accumulation between 1962 and 1976 may have been a consequence of government policy.

1970s - 1980s
The increase in the national savings ratio was not always smooth. The ratio reached a 28 percent level as early as 1977 but then slipped to 22 percent during 1980-82 with the slowdown of economic growth, before rising sharply again.

By 1986, Korea was experiencing real growth of 12.9% and had achieved a saving ratio of 33.1%. South Korea's sustained growth boom resulted in a national saving rate that was among the highest in the world. The growth was attributable to increased use of productive inputs, physical capital in particular, than to productivity advances. The rapid capital accumulation was driven by an increasingly high savings rate due to a falling dependency ratio, a lagged outcome of rapidly falling mortality during the colonial period.

Savings rates sharply declined from 1989. The fall in Korea's saving rates for this period can be attributed to lowered income growth rates, rising inflation rates, and increased government budget deficits. The Asian financial crisis of 1997-98 exposed longstanding weaknesses in South Korea's development model including high public debt/equity ratios, massive foreign borrowing, and an undisciplined financial sector. The decline in gross savings rates fell from 36.6% in 1998 to 30.7% in 2008 due to a dramatic decrease in personal savings.

Personal savings collapsed from 18.5% of GDP in 1998, to about 5% between 2006 and 2008; the net personal savings rate was roughly 2.5% in 2008. Despite this trend in personal savings, gross savings have remained durable due to economic expansion and income growth. In the aftermath of the Asian financial crisis, increased risk and uncertainty have increased precautionary savings by firms. The demographic transition of the Korean population may have influenced the savings rate. The life-cycle hypothesis posits that individuals save during their working years and spend their savings after retirement. Korea's population is rapidly ageing, rising the old-age dependency

Further Reading/References;


ratio - the number of dissavers is rising relative to the number of savers, thus reducing aggregate savings. The rising old-age dependency ratio has had a large impact on savings rates.

Questions
1. Explain what is meant by government policy. What change in government policy occurred in Korea in the 1960 – 1980 time period? What impact had the change in policy on the savings rate?

2. Looking back over corporate, private (personal) and public savings rate, describe the trend in South Korea. What is the driver of savings for the Koreans? Consider the corporate, private (personal) and public savings rate.

3. According to the life-cycle hypothesis, explain the pattern of saving for an individual over his/her lifetime? What impact does this behaviour have on the saving rate?

4. Read this article from The Economist (http://www.economist.com/node/3839554). Now discuss why it is/is not (in your opinion) good to have a high national savings rate?

5. Give an example of a country with a low savings rate. Are the implications positive or negative? Explain.
ARBITRAGE: IS THERE SUCH A THING AS A ‘FREE LUNCH’?

With financial markets operating twenty four hours a day, seven days a week throughout the world it is no surprise that there tend to be price discrepancies in the securities being traded. It is the manipulation of these discrepancies by a relatively small group of professionals that is referred to as arbitrage. Those who partake in this activity are called arbitrageurs.

Arbitrage has existed in some form or another since the middle ages. An early example of ‘exchange rate arbitrage’ took place in fairs held in large cities throughout Europe where traders came, each with their own country’s currency, to buy and sell goods. An exchange rate would be agreed upon and each fair generally had a fixed exchange rate which allowed arbitrageurs take advantage in the different locations i.e. sell goods in fairs where your currency was weak and buy in those where it was strong.

From here the bill of exchange was introduced which involved four people. Two people managing the exchange of the money, one in France and one in England for example. A person would go to the ‘taker’ in France and pay the going exchange rate for sterling. He would then have a person pick up the sterling in England from the English ‘payer’. These took anything up to six months to be completed and cashed in. It was possible, if one had a network of correspondents in the major banking locations, to take advantage of the ability to communicate the state of the markets. Since the introduction of coinage there were huge differences in the value of currencies due to the clipping of coins. Clipping involved clipping small pieces off a silver or gold coin and melting down these pieces to make new coins which led to both clipped coins and new coins having less metal content than the original coins. In the 17th Century coins were made with serrated edges to avoid this practise.

Early arbitrage took place with the trading of goods and the exchange of money. With the development of financial markets it was inevitable that arbitrage would find its place within the trading of securities. Initially arbitrage consisted of moving goods and information over large distances which was ideal for manipulation of any discrepancies available. In modern arbitrage however information is processed in seconds and this leaves a very small gap where arbitrage can take place. True arbitrage opportunities are few and far between, because
once identified, they disappear with alarming speed.

It was not until academics began looking at price options and strategy that arbitrage took on a whole new meaning in financial markets. For Fisher Black and Myron Scholes’ model of option pricing to work the market has to have two types of people operating in them. Firstly those who don’t know what they were doing and those who do. It’s the people who understand the pricing of securities that can manipulate the market to make a risk free profit.

Black was unable to partake in the venture but Scholes took the model and joined with economist Robert Merton and the experienced trader John Meriwether and together they set up the firm called Long Term Capital Management (LTCM) in 1994. The company worked with the theory of convergence, going long on cheap options and short on higher priced options in the hope that they would converge and LTCM would make a ‘risk free’ profit. The returns from these transactions were relatively small and required additional capital. This was done through leveraging against their existing assets. At the final stages of the company this ratio was a massive 42:1. Perold 1999 (cited in Mallaby 2010)

The Black – Scholes models “most important assumption is that the underlying market such as stocks – functions properly.” (Dunbar 2000, p.43) This assumption left them unprepared for the events of 1998. Russia announced default on its debts and the markets reacted by moving to safer financial assets. LTCM were unable to make up for the losses they sustained and in order to avoid a chain reaction involving all the companies which had invested in LTCM the company was bailed out by the Federal Reserve.

The fact that arbitrage exists is proof that only the weak form of the Efficient Market Hypothesis (EMH) holds where the only data available for prices is in the past and not all information is included in the price. Arbitrage is believed to smooth out the many, irrational fluctuations in the market. Because, if prices are too high due to positive events they will be brought back down to their rightful value once arbitrage has taken place and vice versa. As is evident from the

Further Reading/ references;


case of LTCM, arbitrage does involve risk and large amounts of capital as stated by Shleifer and Vishny (1997) which leaves the question ‘is there such a thing as a free lunch?’

**QUESTIONS:**

1. Do you think arbitrage is risk free? Explain your answer.
2. Clipping of coins was common up to the 17th century. Can you explain why coins with serrated edges put a stop to this practise?
3. With the advent of computers and the internet arbitrage has a smaller gap in which to occur. Discuss.
4. Using this case study, explain the effects of external factors on markets.
5. Briefly explain the theory of EMH in your own words.

**Week 7 ~BOOK REVIEW FEEDBACK~**
INTRODUCTION
Beginning in the mid-1880s, loose monetary and fiscal policies substantially worsened macroeconomic conditions in Argentina. The monetary base grew at an annual average rate of 18% (driven by the issuance of paper currency emissions), inflation averaged 17%, and the paper peso depreciated at an average rate of 19% between 1884 and 1890.

BACKGROUND
With the election of the war hero, Julio Roca, as president, Argentina witnessed a resurgence of foreign trade and capital flows from Europe. The funds were used to construct railroads and public works and modernize Buenos Aires. The series of unprecedented state-run development projects in Latin America were possible due to Argentina’s ability to borrow extensively abroad as a result of the open capital markets that prevailed in the nineteenth century. Argentina was the fifth largest sovereign borrower in the world.

1880-1886
Although the economic policies of the 1880s stimulated short-run economic boom in Argentina, they posed potentially serious long-run financing challenges. The slow maturation of the development projects impeded the country’s ability to service its debts creating a maturity mismatch problem. In addition, Argentina issued bonds in sterling or gold on European capital markets while the country operated on a paper standard (following several failed attempts in the early-to-mid 1880s to adopt a gold or bimetallic standard). The currency mismatch problem meant that a depreciation of the paper peso impaired the country’s ability to service its gold debts.

1886-1890
A fraudulent election in 1886 saw the brother-in-law of President Roca, Miguel Celman, succeeding him as president of Argentina. In an attempt to reduce the country’s rising debt level two of the country’s most important railways were sold to British capitalists. Even though the government stopped borrowing funds to finance new railway projects, it did not restore fiscal discipline; instead, it began issuing additional debt through state banks. From 1886 to 1890,
Argentina passed a series of “banking reforms” that fuelled the expansion of credit and paper money issues. National and provincial banking authorities ratified a Free Banking Law in 1887 which authorised any banking association to issue notes provided that it purchased gold bonds to the full amount of the notes issued. The banks that participated in the note issuance scheme floated loans in Europe to finance the purchase of the domestic gold bonds that backed note issuance. Foreign investors were essentially backing a credit boom in Argentina, financed by the issuance of new paper currency.

The Argentine economy worsened towards the end of the decade, with as much as 40% of foreign borrowing going towards debt service. Railway net profits were declining and gold pesos were trading at a large premium relative to paper pesos. By the end of the decade, it was clear to the financial community that paper pesos were inadequate to cover the normal service on the debt. Then in 1889 the government paid off some of its gold-denominated liabilities with paper currency. Paper pesos declined in value and investors dumped paper pesos in anticipation of a further decline in its value. An attempt was made to defend the exchange rate but by December 1889, the stock of gold had dwindled such that it could no longer carry out this intervention in the currency market.

Even though the Baring Crisis had its origins in Argentina, its effects were quickly felt in other parts of the world, in particular London. Baring Brothers, the firm that underwrote most of Argentina’s foreign debt issues, was on the verge of bankruptcy and unable to meet its debt obligations. The Bank of England orchestrated an international rescue fund to save the troubled House of Baring, the financial institution that threatened to bring down Britain. The rescue operation prevented a general financial collapse on European markets. However, the central bank did little to help debt-ridden Argentina.

1890
After the Argentine government and the House of Baring failed to come to an agreement, Argentina defaulted on nearly £48 million of debt in 1890. Argentina subsequently experienced a severe banking crisis in January 1891. Argentina’s real GDP fell by 11% between 1890 and 1891. Argentina suffered a deep recession for several years and did not fully recover from the crisis until the turn of the century, following a debt workout and more than a decade of monetary and fiscal reforms.

Further Reading/References;
Questions:

1. Describe what inflation is. What are the effects of inflation in the domestic market? What are the effects of inflation to the exchange rate.

2. What is the approach adopted by the Argentinean government in the 1880-1886 period? Keynesian or classical? Explain.


4. Why is important for governments to adopt a fiscal and monetary policy?

5. In your opinion, what are the mechanisms that occur when a national debt crisis spreads to other countries? Explain.

6. Describe and compare the pros and cons of defaulting?
INTRODUCTION

Great Britain experienced an economic boom in the years building up to the financial crisis of 1772. Exports to America surged and London became an important network between provincial financial areas. This network was the catalyst for the lack of confidence that spread after the collapse of London banking house Neal, James, Fordyce and Down. The man held responsible for this collapse was banking partner Alexander Fordyce. Fordyce had speculated wildly, shorting East India Company shares while funding his losses using customers’ deposits. Once the news of the collapse hit Edinburgh the system of trust which had kept the credit structure afloat was gone.

The Douglas, Heron & Company, operating as the Ayr bank, was established in Scotland in 1769 based on the scheme championed by Scotsman John Law. Law believed that confidence was the basis of credit. Before this paper money had to be backed by gold, he felt banknotes would be just as valuable as coins of silver and gold. This made credit very risky as it now became dependent almost solely on confidence. Virtually overnight the bank handed out excessive loans to their privileged customers, with little or no collateral.

Several branches opened throughout Scotland, its main aim was to enhance and support the expansion of agriculture, trade and business. The bank brought with it a sense of optimism and confidence which led to customers overlooking the unlimited liabilities they faced on borrowings. Many of the banks customers were speculators involved in both American and West Indian trades, especially tobacco and sugar. A discovery after the bank collapse showed that many of the company’s directors were closely connected to these speculators and oversaw the transfer of funds, creating mutual credit agreements.

The bank spent a year after the collapse of Neal, James, Fordyce and Down trying to retain confidence but when the Bank of Scotland and the British Linen Company refused to accept Ayr Bank notes, the bank folded. The Ayr bank ‘traded beyond their means; divided control by permitting branches to act independently; forcing the circulation of their notes; giving credit too easily; ignorance of the

Bills became so universally accepted in lieu of specie, became almost equal in value: and it being in every one’s power to draw a bill who could not raise a shilling in specie, hence a door was opened for schemers of every denomination, a knot of whom assuming the external semblance of honesty and fair dealing, could create that capital they never possessed . . . . And indeed, when paper-currency gains such a footing as to be in universal use, it is a matter of no small difficulty so to discriminate as to distinguish the good from the bad . . . . ’

London Chronicle, July 1772
(cited in Hoppit 1986)
principles of business; and carelessness of officers’ (Kerr 1908).

In scenes similar to the bank run in Frank Capra’s ‘It’s a wonderful life’ depositors rushed to the bank looking for repayments of their bills of exchange. Estate owners were forced to repay loans, which most were unable to do. The Ayr bank offered a £100 reward for anyone who turned in those spreading rumours about the sad state of the bank. This move went some way towards reassuring people but as more companies collapsed this confidence soon subsided.

Within months from June 1772, fifteen private banks in Edinburgh went bankrupt. Douglas, Heron & Company closed on 25 June with the intention of reopening in just three months. The Scottish aristocracy were now involved in an attempt to bail out the bank. The Bank of England offered to step in if the aristocrats supported its loan with bonds on numerous English lands. This agreement never went through as the aristocrats did not want to take on the full responsibility of the banks liabilities as co-partners and a cost of £300,000.

The report compiled following the 1772 crisis outlined how the bank was mismanaged and helped prepare a suitable regulatory framework for banking practices. Up to then rules and regulations were ignored and unsecured loans were the norm. The tide changed for some time in Scotland and bankers were given short rein on their consumption and private lifestyles.

Many of the loans were never collected and the repercussions reverberated throughout Scotland. Building works ceased through the summer of 1772 and many companies struggled to pay workers’ wages. Bank of Scotland and Royal Bank dominated Scotland post 1772 and were responsible for the rebuilding of Scottish banking in their supervisory roles. The managers of the Douglas, Heron & Company still insisted that the losses occurred in the normal operations of the bank.

Further Reading/ references;


QUESTIONS:

1. Expanding on the case study explain how confidence backed money compares to gold backed money. Which do you think is better? Explain your answer.

2. Can you discuss any similarities you see in this case study and the financial crisis experienced in Ireland since 2008?

3. The Ayr bank issued a reward for information regarding the spreading of rumours. Do you think this was a good idea? Would it work in today’s financial climate?

4. Discuss the aristocrats offer to support the Douglas, Heron & Company in comparison to the Irish Government supporting its banks with NAMA? In your opinion, are their similarities?

5. Briefly discuss the prominence of un-backed loans in the crisis of 1772.
Week 9 Case Study 1

YUGOSLAV HYPERINFLATION 1992 - 1994

1991 saw the break-up of the six country Socialist Federal Republic of Yugoslavia (SFRY) following the Yugoslav wars. This led to the formation of the Federal Republic of Yugoslavia (FRY) i.e. Serbia and Montenegro. The Yugoslavian Government supported the Croatian and Bosnian Serb armies which affected their trade among the other former SFRY countries and resulted in a United Nations international economic embargo on Yugoslavia's commercial transactions thus severely limiting Yugoslavia's output, leading to a higher fiscal deficit.

Yugoslavia had run constant inflation and chronic balance of payments deficits in the years leading to the 1992 crisis. This came to a head when foreign reserves and domestic capital were exhausted. Domestic borrowing was the only form of borrowing due to the UN embargos which preventing lending to Yugoslavia. The government turned to inflationary financial measures and the printing of more money. The seniorage, i.e. revenue the government received from the excessive printing of money, was used to finance the budget deficit, which in turn led to hyperinflation. The monthly inflation rate rose above 50% and by its peak in January 1994 prices rose by 313,000,000%.

Yugoslavia’s fiscal deficit went from 3% of GDP in 1990 to 28% of GDP in 1993. Hyperinflation was followed by hyper- unemployment and tax revenue fell from $US144 million in 1993 to $US28 million in January 1994. The government had used up all of its hard currency and turned to its citizens who were restricted access to their bank accounts in government banks. Long queues would form daily where people hoped to withdraw a portion of their hard earned savings, many being turned away. The currency black market took hold with households turning to Deutschmark. Workers were still receiving wages in Yugoslav dinars and at its height the exchange rate was 1DM= 6trillion dinars. Dollarization took place in January 1994 where the domestic currency was replaced by foreign currency i.e. the German Deutschmark took over as the unit of currency in Yugoslavia.

Source: http://www.banknotebank.com/country/Yugoslavia?sort=date&page=2
A common occurrence in hyperinflationary episodes is with the increase in money supply there is a decrease in real money value and a loss in its purchasing power. The social impact of hyperinflation only fuelled the crisis. Gasoline became scarce and people stopped driving their cars and turned to public transport. However due to overcrowding many passengers did not pay for their travel leading to loss of earnings for the public transport companies which could then not afford the upkeep of the transport. Citizens also postponed paying their utility bills because the rate at which the currency was devaluing meant that they would continue to have to pay less as the real value reduced every day.

The government introduced price controls, in attempt to curb inflation, which led to shortages in consumer goods. Producers could not afford to produce goods to be sold at such low prices. Some stores operated by the government were selling goods at artificially low prices however they were seldom stocked. Instead goods could only be got on the free market at exorbitantly high prices. Farmers were also restricted in the amount of fuel they received thus severely limiting the quantity of crops they could produce.

The government introduced a new unit of currency in October 1993. The new dinar was worth one million old dinars. This in turn increased the rate of exchange for Deutschmarks bringing it up to 1DM= 10 million new Dinars. In total between 1991 and 1998 the dinar was devalued 18 times bringing with it severe social consequences. The same as $1 becoming $0.0000000000000000000001 with prices staying the same or rising and savings being wiped out. By pegging the new super dinar to the Deutschmark hyperinflation ended and inflation reduced to 2,143% within a month. The Federal Republic of Yugoslavia continued to experience high levels of inflation until its break up in 2005 but never again saw the levels the early 1990’s. The Yugoslavian hyperinflation is the second largest and second longest episode in history behind Hungary and Russia respectively.

Further Reading/ references;


QUESTIONS:

1. Explain the term hyperinflation in your own words?

2. Many believed that it was the UN embargo that led to the hyperinflation in Yugoslavia. Using an example of another country which also had an embargo placed upon it discuss whether you agree that the UN embargo was the cause of the Yugoslavian case? Explain your answer.

3. Why did Yugoslavian citizens turn to the black market during the period outline in the case study?

4. From reading the case study, can you briefly discuss how important foreign trade is to an economy?

5. Compare and contrast the Yugoslavian hyperinflation to that experienced in Zimbabwe in 2008/2009. Can you see any similarities between the two? What does this tell you?
Week 9 Case Study 2

UNEMPLOYMENT: TRINIDAD AND TABAGO
1970 - 1996

INTRODUCTION
This southern Caribbean country obtained independence in 1962, becoming a republic in 1976. Unlike most of the English-speaking Caribbean, Trinidad and Tobago's economy is primarily industrial, with an emphasis on petroleum and petrochemicals. While the petroleum sector contributed significantly to output, export and government revenue, its contribution to employment was relatively small (Downes, 1998).

BACKGROUND
The agricultural sector was the main source of employment up to the Second World War. Agricultural products include sugar, cocoa, and citrus products in particular. The decline of agriculture (especially the fortunes of the sugar industry) resulted in high rates of unemployment. Furthermore, many persons developed a negative attitude to agricultural work and preferred to wait for higher paying non-agricultural jobs in urban areas. Due to improved conditions in the sugar industry, boom in cocoa prices or export opportunities the demand for agricultural labour increased. However, the non-agricultural sector was only able to absorb a small proportion of the available labour force. High levels of unemployment especially in the urban areas continued.

1950s – 1960s
With the decline of the agricultural sector, the petroleum sector (i.e., exploration and production, refining, petrochemicals, service contracting and asphalt production) became the major source of output growth. By the 1950s, several major oil companies (i.e., Shell, Texaco) were involved in large scale oil refining. The petroleum sector contribution to employment was relatively small. However, it did contribute significantly to output, export and government revenue.

The "existence of chronic unemployment or underemployment, that is, the long term presence of a labour surplus, was officially acknowledged by the time of the First World War" (Ramesar, 1977; 22)

"Petroleum extracting and refinery accounted for almost three-quarters of exports, one-fifth of government revenue and 20% of GDP" [Auty and Gelb, 1986: 1162].

TIMELINE MACROECONOMIC: TRINIDAD AND TABAGO

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1970s
The oil prize bonanza of the 1970s (oil price shock in 1973 and 1979) increased the share of the petroleum sector in current price Gross Domestic Product significantly. The sectoral distribution of employment indicates that in 1970 while the agricultural sector accounted for 23% of the employed labour force, the petroleum and related sectors accounted for 4.9 percent.

With the decline of the agricultural sector as the main employer of labour, the wholesale, retail, manufacturing and government sectors became the main sources of employment in Trinidad and Tobago. The unemployment rate decreased steadily from its peak at 15.4% in 1973 to 9.9% in 1982. The steady decrease in unemployment (growth in employment) was therefore associated with the ‘boom’ period in Trinidad and Tobago.

1980s
The dependence of the economy on the petroleum industry can be seen when the slump in oil prices in the early-1980s brought the fiscal position under serious pressure. The Government cut spending, devalued the currency (1986) and ultimately required the assistance of the IMF in 1988. The period 1982 to 1990, saw a sharp increase in the rate of unemployment from 9.9% to 20%.

Data source: (www.cso.gov.tt, 2005)

1990s
Since 1990, there has been a steady fall in the rate of unemployment. The Government intensified efforts in economic diversification which resulted in the creation of jobs in the services sector, with most of the employed engaged in private sector (including self-employment) activities.

Further reading/References;
Trinidad and Tobago’s Central Statistics website. Available at; http://www.cso.gov.tt/Pages/default.aspx
QUESTIONS

1. How is the unemployment rate measured? Consider the labour force, students and the elderly in your answer.

2. What are the three types of unemployment? Explain using the above case study.

3. Is unemployment a big problem? What are the main causes of unemployment? Compare Trinidad and Tobago’s high unemployment rate with Ireland’s high unemployment rate in the 1980s?

4. Draw and label a business cycle. Using the case study, explain the characteristics of the different stages of the business cycle.

5. Are unemployment and the business cycle related? Show on the diagram (from Q.3) how you think they are related.

6. What is your understanding of “economic diversification”? Explain how the Trinidad & Tobago government’s efforts in economic diversification in the 1990s lowered the unemployment rate.
Week 10 (Case Study 1)

FISCAL POLICY: CANADA 1930 - 1985

INTRODUCTION
Covering most of the northern part of the North American continent, Canada is the world’s second largest country by total area. Canada is a federation of ten provinces (Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan) and three territories (Northwest Territories, Yukon, and Nunavut).

BACKGROUND
In the early 20th century, fiscal policy did not play a significant role in government action regarding the economy. This was due to a number of factors. First, the government sector represented a relatively small component of the overall Canadian economy, having only a minimal impact on economic growth and employment. Secondly, the Canadian governments tended to leave the economy to freely expand and contract, due to dominant view that the economy would self-correct.

In the 1930s, several events challenged this traditional approach to government spending and taxation. Beginning in the late 1920s, Canada and the world was struck by the Great Depression. Another important event was the rise of a new economic theory, developed by the British economist John Maynard Keynes. In the context of the Great Depression, Keynes argued that governments should pursue expansionary fiscal policies to spur economic growth. Over the next several decades, Keynesian Economics came to dominate western academic and governmental approaches to economic policy.

The third important event was the Second World War. During the War, the Canadian government became a large component of the overall economy, as it spent billions of dollars on military goods. As a result, the perception arose, both inside government itself and within society in general, that the state could be used to pursue broad social goals, such as long-term economic growth.

Following the end of the Second World War, the Canadian federal government committed to maintaining high and stable levels of employment and income by maintaining consumer demand. In this context, the federal government focused on swiftly moving from a war-time to peace-time economy, shifting public spending from the military to investments in human capital and housing.

During the 1950s and 60s, the Canadian government adjusted its budgetary position to accommodate business cycles, with expansionary policies in slowdowns and contractionary policies when the economy overheated. Throughout this period, the Canadian

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THEORIES
Keynesian Economics
Philips Curve
Inflation
Government Deficits
The economy enjoyed considerable success, with high levels of real growth, rising personal disposable income, and strong levels of employment. The government sector became a much greater factor in the overall Canadian economy during this period, as public spending increased significantly. Between 1950 and 1970, the federal government’s share of the national Gross Domestic Product (GDP) rose sharply, from 9.5 to 18.5 percent (Dodge, 1998).

In the early 1970s, Canada faced both a recession and a large spike in oil prices. The federal government pursued both a stimulative monetary policy and an expansionary fiscal policy. While the policies were somewhat successful, an important consequence was a sharp increase in inflation.

In the latter part of the 1970s, the Government of Canada attempted to address the inflation problem by introducing wage and price controls, tighter monetary (increases in interest rates) and fiscal policies. As an outcome of these economic policies Canada faced stagflation, a combination of weak economic output, high unemployment, and accelerating inflation.

While inflation was brought under some measure of control by the end of the decade, the tight monetary and fiscal policies contributed to the 1981-82 recession. Rising debt levels were of concern as a result of running consecutive fiscal deficits since 1976, with particularly large increases in the 1982-85 period. The federal government was also faced with rising debt charges as the debt level rose, which placed further strain on its finances. By the mid-1980s, federal government debt levels had risen sharply relative to the economy’s total output.

QUESTIONS:

1. Describe what a fiscal policy is. What are the main components of a fiscal policy? In a graph, explain what the effects are from and expansionary fiscal policy. What would be the effects from a contractionary fiscal policy?
2. Describe what a monetary policy is. What is the main component of a monetary policy? Explain what the effects are from and expansionary monetary policy. What would be the effects from a contractionary monetary policy?
3. Compare and contrast the Keynesian approach and the classical approach.
4. Discuss whether or not the government should intervene in the economy.
5. Which periods were dominated by adopting a Keynesian approach? What were the effects on the Canadian economy?
6. How does a government fund their fiscal policies? Using the case study above can you outline some places the government spends money?
Week 10 (Case Study 2)

INEQUALITY: ARMENIA

INTRODUCTION
Armenia is a small country located in the south Caucasus region of Eurasia that has embarked upon a transition from a centrally planned to a market oriented economic system. This landlocked country is located at the crossroads of Western Asia and Eastern Europe.

BACKGROUND
In 1920, Armenia became one of the 16 Soviet republics constituting the Soviet Union. During the Soviet period the Armenian culture and economy flourished. During the last 20 years of the Soviet Union and prior to the breakdown of the Soviet Union, inequality and poverty were not major political or economic problems in Armenia. During World War II Armenians suffered enormous losses and were subjected to periodic deportations ordered by Stalin’s regime. After the collapse of the Soviet Union, Armenia re-emerged as an independent republic. However, transformation, although necessary and desirable, does not come without problems and the transition has not gone smoothly, not least because Armenia has received a series of blows which have seriously affected the economy.

The republic has been largely unable to repair damage caused by the devastating Speetak earthquake in 1988, which destroyed about 10% of industrial capacity and housing. Over one third of Lake Sevan, the only fresh water reservoir, has been drained threatening the drinking water supply. Massive deforestation has occurred as the population uses every available source for firewood. Followed by the collapse of the Soviet Union, a war erupted with the neighbouring country of Azerbaijan over the enclave of Nagorno-Karabakh. The transportation blockade enforced by Azerbaijan and Turkey has serious economic consequences as Armenia was virtually cut off from trade. These and other negative developments resulted in the deep economic and social crisis of the 1990s, one of the most devastating consequences of which was the widespread impoverishment of the population, income inequality, and the polarization of society to an appalling degree.

While strong growth in recent years has reduced poverty and inequality, nevertheless they remain a major problem in Armenia, as

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**TIMELINE MACROECONOMIC: Armenia**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Beginning of War in Nagorno-Karabakh</td>
</tr>
<tr>
<td>1988</td>
<td>Earthquake</td>
</tr>
<tr>
<td>1989</td>
<td>Oil Crisis</td>
</tr>
<tr>
<td>1990</td>
<td>Independence</td>
</tr>
<tr>
<td>1991</td>
<td>Collapse of the Soviet Union</td>
</tr>
<tr>
<td>1993</td>
<td>Transportation blockade</td>
</tr>
<tr>
<td>1994</td>
<td>Nagorno-Karabakh War Ceasefire</td>
</tr>
<tr>
<td>2000</td>
<td>Poverty Reduction Strategy initiated</td>
</tr>
</tbody>
</table>

“I have used the picture of a city not to hazard a visionary depiction of the New Jerusalem but to show that income distribution is rooted in the way in which we organize the community.” (Pen, 1971; 411)
about half of Armenia’s population is still considered poor. Poverty becomes a persistent structural challenge impeding social-economic development. This implies that very little of the additional income generated by growth has gone to the poor since they lack access to productive resources and employment. This helps to explain the so-called "mystery" of growth without poverty reduction.

Thus the reasons for poverty in Armenia are many-sided. Beside non-economic factors, they are conditioned by social relations and are derived from characteristics of decision making and behaviour of different social groups and institutions, as well as individuals.

There are many measures of inequality that summarize the way income is distributed across the population and many ways to paint this picture for Armenia: one half of all income accrues to just the richest 12 per cent of the population; the income of the wealthiest quintile is 32 times higher than that of the poorest quintile; and the poorest 55 per cent of the population - those whose fall below the poverty line - receive just 16 per cent of the total income. All these measures point to the same conclusion: income inequality in Armenia has been extremely high.

Table 1. Income Poverty Main Indicators in Armenia*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1996</th>
<th>1999</th>
<th>2001</th>
<th>2002</th>
<th>2003*</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Per Capita (USD)</td>
<td>512.1</td>
<td>698.2</td>
<td>703.5</td>
<td>792.1</td>
<td>914.3</td>
</tr>
<tr>
<td>GDP Per Capita (PPP USD)</td>
<td>1,008.3</td>
<td>1,672.6</td>
<td>1,900.2</td>
<td>2,178.2</td>
<td>2,369.4</td>
</tr>
<tr>
<td>Economic Growth (cumulative, 1996-100)</td>
<td>100.0</td>
<td>114.3</td>
<td>132.9</td>
<td>150.4</td>
<td>171.3</td>
</tr>
<tr>
<td>Poverty Incidence (%)</td>
<td>54.7</td>
<td>58.1</td>
<td>59.9</td>
<td>49.7</td>
<td>42.8</td>
</tr>
<tr>
<td>Extreme Poverty (%)</td>
<td>27.7</td>
<td>22.9</td>
<td>16.0</td>
<td>13.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Poverty Gap (%)</td>
<td>21.5</td>
<td>19.0</td>
<td>15.1</td>
<td>13.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Poverty Severity (%)</td>
<td>11.1</td>
<td>9.0</td>
<td>6.1</td>
<td>5.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Poverty Line (USD per month)</td>
<td>24.8</td>
<td>22.4</td>
<td>21.7</td>
<td>21.4</td>
<td>21.8</td>
</tr>
<tr>
<td>Extreme Poverty (Food) Line (USD per month)</td>
<td>15.2</td>
<td>13.7</td>
<td>13.3</td>
<td>13.1</td>
<td>12.4</td>
</tr>
<tr>
<td>Gini Coefficient by Current Expenditures</td>
<td>0.444</td>
<td>0.372</td>
<td>0.344</td>
<td>0.325</td>
<td>0.371</td>
</tr>
<tr>
<td>Gini Coefficient by Current Income</td>
<td>0.602</td>
<td>0.593</td>
<td>0.535</td>
<td>0.481</td>
<td>0.438</td>
</tr>
<tr>
<td>Gini Coefficient by Total Income</td>
<td>0.653</td>
<td>0.575</td>
<td>0.528</td>
<td>0.449</td>
<td>0.455</td>
</tr>
<tr>
<td>Share of Income of poorest 10% in the Total (%)</td>
<td>na</td>
<td>0.7</td>
<td>0.8</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Share of Income of poorest 20% in the Total (%)</td>
<td>na</td>
<td>2.6</td>
<td>3.2</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Share of Income of richest 10% in the Total (%)</td>
<td>na</td>
<td>45.0</td>
<td>41.8</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Share of Income of richest 20% in the Total (%)</td>
<td>na</td>
<td>60.3</td>
<td>57.7</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>


Armenia is an excellent country to study poverty and inequality because during its transition to a market economy it has experienced a precipitous fall in the average standard of living and a dramatic increase in inequality in the distribution of income and wealth. As a result of these two new macroeconomic phenomena of the social-economic situation, the proportion of the population living in poverty has risen to unprecedented levels. Widespread poverty and inequality threatened the political stability of the new democratic government of Armenia in the 1990s.

Since 1999 owing to continued strong economic growth and the implementation of the Poverty Reduction Strategy policies, many of the poverty and inequality indicators have improved and over the past

Further Reading/ References:


number of years the poverty level was slightly reduced. Current circumstances in Armenia are not without promise, however. Despite the harsh conditions, the economy is growing steadily. The Armenians continue to overcome enormous challenges to the survival and integrity of their homeland, culture and freedom.

Questions:
2. Outline some of the main types of inequality. Consider income, social, opportunity and any other you perceive to be of importance.
3. What is the effect of inequality on economic growth and economic performance? Does inequality have a negative effect on efficiency?
4. Explain the “Mystery” of growth without poverty reduction in your own words. Did this occur in Ireland over the past 2 decades? What impact had the Celtic Tiger on inequality in Ireland?
5. Discuss some of the ways that inequality can be measured. What is the Gini Coefficient? Is it a good indicator of inequality?
6. Read the following paper (http://oxrep.oxfordjournals.org/content/12/1/29.full.pdf)

   Explain Pen’s Parade of Dwarfs with the help of the paper. What do you think the distribution would be for Armenia? And Why?

Week 11 SAMPLE EXAM PAPER