ECONOMY FINANCE AND FINANCIAL MARKET

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Financial economics is the branch of economics concerned with "the allocation and deployment of economic resources, both spatially and across time, in an uncertain environment" It is additionally characterised by its "concentration on monetary activities", in which "money of one type or another is likely to appear on both sides of a trade" The questions within financial economics are typically framed in terms of "time, uncertainty, options, and information"

- Time: money now is traded for money in the future.
- Uncertainty (or risk): The amount of money to be transferred in the future is uncertain.
- Options: one party to the transaction can make a decision at a later time that will affect subsequent transfers of money.
- Information: knowledge of the future can reduce, or possibly eliminate, the uncertainty associated with future monetary value (FMV).

A topic of general interest studied in recent years has been financial crises

Financial economics is the branch of economics studying the interrelation of financia lvariables, such as prices, interest rates and shares, as opposed to those concerning the real economy. Financial economics concentrates on influences of real economic variables on financial ones, in contrast to pure finance.

It studies the following:

- Valuation - Determination of the fair value of an asset
- How risky is the asset? (identification of the asset appropriate discount rate)
- What cash flows will it produce? (discounting of relevant cash flows)
- How does the market price compare to similar assets? (relative valuation)
- Are the cash flows dependent on some other asset or event? (derivatives, contingent claim valuation)
- Financial markets and instruments
- Commodities
- Stocks
- Bonds
- Money market instruments
- Derivatives
- Financial institutions and regulation

Financial econometrics is the branch of Financial Economics that uses econometric techniques to parameterise the relationships.

In the Journal of Economic Literature classification codes, Financial Economics is one of the 19 primary classifications. It follows Monetary and International Economics and precedes Public Economics. Detailed sub classifications are linked in the following footnote

Financial Economics
General General Financial Markets
Financial institutions and Services
Corporate finance and Governance

Models in financial economy

Financial economics is primarily concerned with building models to derive testable or policy implications from acceptble assumptions. Some fundamental ideas in financial economics are portfolio theory, the Capital Asset Pricing Model. Portfolio theory studies how investors should balance risk and return when investing in many assets or securities. The Capital Asset Pricing Model describes how markets should set the prices of assets in relation to how risky they are. The Modigliani-Miller Theorem describes conditions under which corporate financing decisions are irrelevant for value, and acts as a benchmark for evaluating the effects of factors outside the model that do affect value.

A common assumption is that financial decision makers act rationally (efficient market hypothesis). However, recently, researchers in experimental economics and experimental finance have challenged this assumption empirically. They are also challenged, theoretically, by behavioral finance, a discipline primarily concerned with the limits to rationality of economic agents.

Other common assumptions include market prices following a random walk or asset returns being normally distributed. Empirical evidence suggests that these assumptions may not hold and that in practice, traders, analysts and particularly risk managersfrequently modify the "standard models".

ECONOMIC AND FINANCIAL MARKET OUTLOOK --December 2012

Marking time until downside risks to global outlook fade The latest International Monetary Fund (IMF) global growth outlook showed another cut to the advanced and emerging economies' forecasts. In 2012,

world GDP is forecasted to increase by 3.3% or 0.2 percentage points less than what was expected in July. 2013's growth forecast was trimmed by 0.3 percentage points to 3.6% to stand a full percentage point lower than the forecasted increase presented a year earlier. Notably, the trajectory for world

growth is upward even if the pace is expected to remain slower than its historical average. Weighing against a faster acceleration is the sharp reduction in government spending and tax increases in many of the advanced countries.The effect of this fiscal consolidation will in part be mitigated by central banks

maintaining very low policy rates. While in most jurisdictions this will be sufficient to ensure that longer-term rates stay historically low, elevated financing costs in some of the highly indebted European countries mean that the European Central Bank (ECB) will have to engage additional policies to align these costs with the official policy rate. In the immediate term, there remains a significant downside risk to the US economy coming from the so called fiscal cliff. We see the probability that the policies that are currently on the books will be enacted as being significantly below 50%; instead, we expect a much smaller degree of fiscal restraint in 2013 than a full-blown fiscal cliff would entail. The risk of a deeper and longer recession in Europe is also a key risk to the outlook. Recent data point to the recession continuing in the final quarter of 2012 with negligible growth forecasted at the start of 2013. The risk is that the structural and economic reforms could prove too formidable and prevent Europe's economy from expanding. Policymakers to date have implemented several programs to ease financial market concerns thereby resulting in a limited decline in financing costs for the economies in the worst fiscal shape. Our view is that there are enough irons in the fire to release the European economy from recession in 2013 with growth likely to accelerate in 2014.

Two steps forward; one step back

Even with these significant headwinds, the latest data were surprisingly upbeat for China and the US although the same cannot be said for Europe. China's economy gradually picked up its pace in the course of 2012 and expanded at a 2.2% pace in the third quarter of the year. October reports suggest that this momentum was, at least, maintained in the final quarter of 2012. Exports, industrial production, and retail trade posted solid gains in October, and the Purchasing Managers' Index rose above the key 50-mark in November for the first time since October 2011. Policy actions by the government and the central bank likely contributed to the stronger performance, and we expect the

year-over-year, % change Real GDP Growth Source: International Monetary Fund, RBC Economics Research Two steps forward; one step back Even with these significant headwinds, the latest data were surprisingly upbeat for China and the US although the same cannot be said for Europe. China's

economy gradually picked up its pace in the course of 2012 and expanded at a 2.2% pace in the third quarter of the year. October reports suggest that this momentum was, at least, maintained in the final quarter of 2012. Exports, industrial production, and retail trade posted solid gains in October, and the Purchasing Managers' Index rose above the key 50-mark in November for the first time since October 2011. Policy actions by the government and the central bank likely contributed to the stronger performance, and we expect the Canada U.S. UK Euro area 2011 2012 2013 2014 year-over-year% change.

Inflation stays contained leaving Fed to focus on unemployment

The US Federal Reserve's dual mandate is to provide price stability and full employment with the first criterion being met by both the headline and core inflation rates at around 2% in October. In 2013, both of these inflation rates are expected to fall below the 2% target as energy prices stabilize and food

prices move only marginally higher due to the drought of this past summer. That leaves the Fed to focus on the labour market because the unemployment rate at 7.7% remains well above the 5.2% to 6.0% full-employment range. Policy remains geared to lowering the unemployment rate with the Fed expected to maintain a very low fed funds target until mid-2015. This stimulative policy will work to mitigate some of fiscal policy restraint on the overall economy's growth rate. External risks keep the Bank of Canada on the sidelines

The myriad of external risks, slowing domestic investment, and a drop in exports that depressed growth in the third quarter of 2012 to a 0.6% annualized rate in Canada saw the Bank of Canada maintain the policy rate at a very stimulative 1.0%. To be sure, the economy is running with relatively limited

excess capacity, but the below-potential gain recorded in the third quarter opened the output gap a little wider meaning, all else being equal, that it will take longer to close the gap than previously estimated. Until the external risks tone down, stimulative domestic monetary policy will serve to insulate the economy from persistently weak export demand. The headline and core inflation rates stand closer to the bottom end of the 1% to 3% target band than the top, so there is no urgency for the Bank to Canada to reduce policy stimulus.

Forecast

Predict to emerge with motor vehicle and parts exports likely to rise alongside higher US auto sales. Elevated demand for commodities, especially as China shifts into higher gear, augurs well for exports of energy and metals to continue to be firm. Import growth is also expected to accelerate although the pace of increase is likely to be slower than exports given the very rapid increases recorded in 2010-2011. From the recent low recorded in mid-2009, Canadian purchases of imported machinery and equipment surged by 52%. We expect the pace to slow in 2013 although still anticipate that overall import

growth will rise over the next two years. Net trade is forecast to make contributions of 0.3 percentage points and 0.4 percentage points to real GDP growth in 2013 and 2014 respectively. This represents the most significant support since 2001 after most of the intervening years showed the sector acted as a drag on growth. Business balance sheet health paves way for investment Canadian nonfinancial corporations saw profits recover from the 60% drop recorded during the Great Recession. As of the third quarter of 2012, profits as a percent of GDP stood at 9.5%, in line with historical averages.

Corporations have also been building up the amount of cash and deposits on their balance sheets. In part, this likely is a reflection of businesses shying away from putting money to work given the uncertain global economic outlook. It may also reflect a build of cash reserves to meet an anticipated increase in expenses such as unfunded pension liabilities. The Bank of Canada's quarterly Business Outlook survey showed that the majority of companies intend to increase investment in machinery and equipment over the next 12 months and to boost head count. That said the margin of companies expecting to increase spending and hiring shrunk. The survey also indicated that lending standards, from both the lender and borrower perspective, remain accommodative providing companies with the capital needed to fund investment at current low interest rates.

While businesses are facing supportive conditions, the uncertain global environment restrained spending on capital goods in the first three quarters of 2012. Spending on structures continued at a brisk clip which we expect to continue given the declines in the vacancy rates in recent quarters. We further expect that as the uncertainty gripping the world economy ebbs, corporations will take advantage of their enviable balance sheet positions and resume spending on machinery and equipment at a faster rate.

Canadian Real Estate Association, RBC Economics Research Cooling in housing market

Activity in the housing market cooled over the spring and summer although the slide subsided with sales rising in September and maintaining the gain in October. The weaker sales followed an unexpectedly robust first quarter spurred by unseasonably warm weather and a round of mortgage rate promotions. The tightening in mortgage rules that took effect in July amplified the pullback already underway at the time. The near-term outlook for housing is for a sustained weakening in activity albeit at a modest pace. This reflects stretched affordability relative to historical averages, high levels of household

indebtedness relative to incomes, and global uncertainty. Some offset will be provided by interest rates remaining historically low. We look for lower resale activity and home prices in Canada in 2013 and 2014. Canadian dollar rally is not done yet The Canadian dollar traded in a well worn range around parity against the US dollar in 2012. We remain bullish on the Canadian dollar based on our view

that commodity prices will remain historically high, interest rates in Canada will rise quicker than in the US, and foreign investors will continue to put their money into Canadian assets, which have a higher rating than many others. Our spot forecast is for the Canadian dollar to gain another 5% against the US in 2013. The currency's strengthening has reduced the cost of imported goods and services and in turn filtered into some components of the consumer price index

Financial markets

Within the financial sector, the term "financial markets" is often used to refer just to the markets that are used to raise finance: for long term finance, the Capital markets; for short term finance, the Money markets. Another common use of the term is as a catchall for all the markets in the financial sector, as per examples in the breakdown below.

Capital markets which consist of:

- Stock markets, which provide financing through the issuance of shares or common stock, and enable the subsequent trading thereof.
- Bond markets, which provide financing through the issuance of bonds, and enable the subsequent trading thereof.

Commodity markets, which facilitate the trading of commodities.

Money markets, which provide short term debt financing and investment.

Derivatives markets, which provide instruments for the management of financial risk.

Futures markets, which provide standardized forward contracts for trading products at some future date; see also forward market.

Insurance markets, which facilitate the redistribution of various risks.

Foreign exchange markets, which facilitate the trading of foreign exchange.

The capital markets may also be divided into primary markets and secondary markets. Newly formed (issued) securities are bought or sold in primary markets, such as during initial public offerings. Secondary markets allow investors to buy and sell existing securities. The transactions in primary markets exist between issuers and investors, while in secondary market transactions exist among investors.

Liquidity is a crucial aspect of securities that are traded in secondary markets. Liquidity refers to the ease with which a security can be sold without a loss of value. Securities with an active secondary market mean that there are many buyers and sellers at a given point in time. Investors benefit from liquid securities because they can sell their assets whenever they want; an illiquid security may force the seller to get rid of their asset at a large discount.

The financial market is broadly divided into 2 types:

1) Capital Market and 2) Money market.
2) The Capital market is subdivided into 1) primary market and
3) 2) Secondary market.

- Raising capital
- Financial markets attract funds from investors and channel them to corporations-they thus allow corporations to finance their operations and achieve growth. Money markets allow firms to borrow funds on a short term basis, while capital markets allow corporations to gain long-term funding to support expansion.
- Without financial markets, borrowers would have difficulty finding lenders themselves. Intermediaries such as banks, Investment Bans, and Boutique Investment Banks can help in this process. Banks take deposits from those who have money to save. They can then lend money from this pool of deposited money to those who seek to borrow. Banks popularly lend money in the form of loans and mortgages.
- More complex transactions than a simple bank deposit require markets where lenders and their agents can meet borrowers and their agents, and where existing borrowing or lending commitments can be sold on to other parties. A good example of a financial market is a stock exchange. A company can raise money by selling shares to investors and its existing shares can be bought or sold.

Derivative products

During the 1980s and 1990s, a major growth sector in financial markets is the trade in so called derivative products, or derivatives for short.

In the financial markets, stock prices, bond prices, currency rates, interest rates and dividends go up and down, creating risk. Derivative products are financial products which are used to control risk or paradoxically exploit risk. It is also called financial economics.

Derivative products or instruments help the issuers to gain an unusual profit from issuing the instruments. For using the help of these products a contract has to be made. Derivative contracts are mainly 3 types:

1. Future Contracts
2. Forward Contracts
3. Option Contracts.

Derivative market

The most obvious buyers and sellers of currency are importers and exporters of goods. While this may have been true in the distant past, when international trade created the demand for currency markets, importers and exporters now represent only 1/32 of foreign exchange dealing, according to the Bank for International Settlements.

- Speculators
- Government spending (for example, military bases abroad)
- Importers/Exporters
- Tourists

Financial market slang

- Poison pill,
- when a company issues more shares to prevent being bought out by another company, thereby increasing the number of outstanding shares to be bought by the hostile company making the bid to establish majority.

Quant

A quantitative analyst with a PhD (and above) level of training in mathematics and statistical method

Rocket scientist

A financial consultant at the zenith of mathematical and computer programming skill. They are able to invent derivatives of high complexity and construct sophisticated pricing models. They generally handle the most advanced computing techniques adopted by the financial markets since the early 1980s. Typically, they are physicists and engineers by training; rocket scientists do not necessarily build rockets for a living.

White Knight

A friendly party in a takeover bid. Used to describe a party that buys the shares of one organization to help prevent against a hostile takeover of that organization by another party.

Spread

The difference between the highest bid and the lowest offer.Role (Financial system and the economy)One of the important requisite for the accelerated development of an economy is the existence of a dynamic financial market. A financial market helps the economy in the following manner.

Saving mobilization:

Obtaining funds from the savers or surplus units such as household individuals, business firms, public sector units, central government, state governments etc. is an important role played by financial markets.

Investment:

Financial markets play a crucial role in arranging to invest funds thus collected in those units which are in need of the same.

National Growth:

An important role played by financial market is that, they contributed to a nations growth by ensuring unfettered flow of surplus funds to deficit units. Flow of funds for productive purposes is also made possible.

Entrepreneurship growth:

Financial market contribute to the development of the entrepreneurial claw by making available the necessary financial resources.

Industrial development:

The different components of financial markets help an accelerated growth of industrial and economic development of a country, thus contributing to raising the standard of living and the society of well-being.

Functions of Financial Markets

Intermediary Functions:

The intermediary functions of a financial markets include the following:

Transfer of Resources:

Financial markets facilitate the transfer of real economic resources from lenders to ultimate borrowers.

Enhancing income:

Financial markets allow lenders to earn interest or dividend on their surplus invisible funds, thus contributing to the enhancement of the individual and the national income.

Productive usage:

Financial markets allow for the productive use of the funds borrowed. The enhancing the income and the gross national production.

Capital Formation:

Financial markets provide a channel through which new savings flow to aid capital formation of a country.

Price determination:

Financial markets allow for the determination of price of the traded financial assets through the interaction of buyers and sellers. They provide a sign for the allocation of funds in the economy based on the demand and supply through the mechanism called price discovery process.

Sale Mechanism:

Financial markets provide a mechanism for selling of a financial asset by an investor so as to offer the benefit of marketability and liquidity of such assets.

Information

The activities of the participants in the financial market result in the generation and the consequent dissemination of information to the various segments of the market. So as to reduce the cost of transaction of financial asset

Financial Functions

i. Providing the borrower with funds so as to enable them to carry out their investment plans.
ii. Providing the lenders with earning assets so as to enable them to earn wealth by deploying the assets in production debentures.
iii. Providing liquidity in the market so as to facilitate trading of funds

encourage longterm investment

Intense competition for long-term financing will therefore characterise the world in the coming years. There is a general need to enlarge the worldwide share of financing for long-term capital investment at the expense of shorttermism and speculation. Policy makers and international regulators should work not only to assure financial stability, prevent global crisis and "level the playing field" toward fair global competition in the markets for global savings. They should also work on creating a prudential and accounting framework that encourages managers of financial institutions to focus more on long-term (rather than short-term) results, especially in regard to investments with significant positive externalities for growth. In fact, long-term investment is crucial for the future of the world economy; and it could also play a positive role in financial market stability. A long-term vision is needed to tackle the major challenges facing our societies: climate change, scarce natural resources, environmental protection, poverty, immigration, and education.

Great transformations are going to characterise the 21st century.

Almost two thirds of the world population, mostly in Asia, will switch from selfsustenance to consumption, from the closed circuit of an agricultural economy to the open source of a market economy. The world economy will experience exceptional demand for capital investment. World population will grow from seven to nine billion by 2050 1 The fastest growing regions according to forecasts will be OECD JOURNAL: FINANCIAL MARKET TRENDS

Africa (7.0%) and developing Asia (5.4%). As a result, North America and Western Europe are expected to fall from 41% of world GDP in 2010 to just 18% in 2050, while developing Asia?s share is predicted to rise from 27% to 49% in 2050 (Figure 3). China is expected to overtake the US to become the largest economy in the world by 2020, to be in turn overtaken by India by 2050. However, the per capita numbers suggest that the convergence process may have several decades more to go savings relative to investment Over the past two decades, the world?s investment rate has been declining.

This has contributed to an excess of saving over desired investment. At the same

time, advanced countries? gross national saving fell from 22.7% of their GDP in

1980 to 19.7% in 2008, even if the pattern differs across countries (Figure 6 and

Table 1). For example, the savings rate fell more in the United States than in any other mature country, from 20.6% of GDP in 1980 to 12.7% in 2008. Gross national saving rates were relatively stable in France and Germany. Households account for most of the drop in national saving in many developed countries (Figure 7). On the contrary, emerging countries have exhibited not only increasing savings, but also investment rates as a result of their strong growth global currencyTherefore, the only alternative to the dollar in the near future is the euro. The European Union?s GDP exceeds that of the United States. It has a stringent and effective inflation target. The monetary policy of the ECB and the Stability and Growth Pact (SGP) contributed to the stability of public finances before the recent financial crisis, and to mitigate the crisis? effects, after 2008. With the outburst of the Greek crisis, the SGP has been extensively tightened and the European Financial Stability Facility (EFSF) has been put into place.

The political reaction of the EU to the European Sovereign Bond market crisis, was strong and on time, and if successful (and we trust it will be successful) may increase even more the long-term expectations of the euro as a stable global currency. The importance of the euro as a reserve currency is bound to increase, especially in the countries that border continental Europe, such as the Mediterranean-basin countries and Russia. As euro-denominated trade increases, the euro reserves of the central banks in neighbouring countries will also grow. Between 2008 and 2009, for example, the euro reserves of the central bank of Russia increased from 42% to 47% of the total, while its dollar reserves fell from 47% to 41%.

Diversification of China's reserves would have an even greater impact

A much greater impact would result from strong diversification in China's reserves. It is estimated that 60% of the official reserves of the Chinese central bank are currently in dollars. A sudden change of portfolio allocation will cause the price of American securities to collapse, with a negative impact onboth the United States and China as well, whose reserves would be devalued. Therefore, it is likely that the Chinese will adopt a strategy of gradual diversification that will require several decades to complete. Gradually, this - given the volumes involved - is a major change that could impact notably in the short-to-medium term.

From growth to financial and fiscal stability

After the Pittsburgh G-20 call for a strong, balanced and sustainablegrowth, the focus of the global community seems to have shifted mostly on financial and fiscal stability. Since high public debt and financial instability are considered the main drivers of the crisis, they have become the main guiding lines of action for regulators and policy makers in the aftermath of the crisis.

There is general consensus that financial and fiscal stability represent central illars of a healthy and well-functioning economic system. Financial and fiscal stability are preconditions for growthThe correlation between financial and fiscal stability is self-evident the Irish and the Portuguese crisis are excellent examples of it. Both financial and fiscal stability are pre-conditions of durable and healthy growth; they are strictly related to the expectations of economic agents and to the planning of economic activity. A well-balanced fiscal and financial environment increases opportunities for economic growth.But growth and stability are interrelated But there is also evidence that this correlation is - in fact - a bidirectional one. Durable and sustainable growth requires financial stability and long-term fiscal consolidation but financial stability and fiscal consolidation both require durable and sustainable growth.

The crisis had a huge impact on advanced countries' public finances