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Impact of Raising Tax Rates in GDP Growth: The Case of Nepal

Sanjaya Acharya

ABSTRACT

This study is an effort to examine whether there is a potential of variations in tax efforts of different types in making a positive impact on economic growth in a typical developing economy. We take the case of Nepal and analyse 44 years (1975–2018) of time series data of growth and fiscal variables. We conclude that Nepal has already reached its optimal tax GDP ratio. Additional efforts to collect more tax revenue are counter-productive; rather, it should take some other structural measures for higher GDP growth. Implementation of several scenarios of revenue replacement does not have a significant positive impact on GDP; however, minimising the contribution by excise duties but replacing its contribution by income tax has minimal positive impact on GDP. It refers to the need to protect Nepalese infant industries at this juncture of the fiscal-growth discourse of this small developing economy.

Keywords: tax rates; public sector revenue; GDP growth

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1 General Background

The impact of restructuring tax rates on GDP growth is crucial in the wake of economic reforms in different economies, more specifically after the mid-1980s that witnessed liberalisations in both factor and product markets. Three significant strands of analysis are existent in this regard so far. Many researchers analysed the impact using partial analysis with select macro variables; however, some followed general equilibrium analysis. The third group of analysis is exploratory in nature, before-after analysis and cross-country comparison. The conclusions of these studies are hardly consistent with each other. In the vast array of literature, evidence shows the growth enhancing and retarding effects of different tax systems and short-term and long-term impact on growth and other macroeconomic performance of the economy. However, as Rimmler et al. (2017) remarks, tax revenue in various forms still dominates the public sector revenue in developed, developing, and underdeveloped economies.

The impact of tax structure on economic growth occurs through its effect on both labour and capital markets. More specifically, the level of capital and intermediate goods tax has a significant impact on economic growth; countries with lower

tax rates grow faster than those applying high tax rates (Gerson, 1998). Regarding the tax types, high direct taxes reduce consumer spending in the short-term and reduce economic efficiency and welfare in the long run, Gale and Samwick (2014). Analysing the relationship between taxes and the rate of economic growth among 23 OECD countries for the period 1965–1990, Widmalm (1999) demonstrated that taxes have a negative effect on economic growth. The econometric analysis also revealed that progressive taxation results in a more adverse effect on real GDP.

Romero-Avila and Strauch (2008) concluded with the negative impact of direct taxes on GDP growth rate per capita through the strong negative impact on capital accumulation. Ferede and Dahlby (2012) and Nechaev and Antipina (2016) also concluded with the overall negative impact of tax effort ratio on the GDP growth rate. However, Asllani and Statovci (2018) and Gasteratos et al. (2016) treated the impact differently to basic consumption products and luxury products with the conclusion that the reduction of the tax rate on the consumption of basic products and an increase in the tax rate on luxury products has a positive effect on the growth of GDP.

Contrary to the conclusions of the studies mentioned above, Arnold (2008) concluded with the

positive taxes in consumption and taxes on personal income. Furthermore, corporate income taxes have the most negative impact on GDP per capita, while real estate taxes and especially reuse tax on real estate has a more positive effect on growth. High corporate taxes discourage potential investors from realising investments in the given country because they reduce the return on invested capital and the capital structure or age of a company (Daniel and Jefferey 2013). Schraztenstaller and Kohler (2015) demonstrated a negative link between corporate tax and foreign direct investment (FDI).

Various studies conclude that public revenues affect economic growth more than public expenditures, given the other macroeconomic parameters.

The public financial system in Nepal has undergone significant changes for the last three and half decades. Several initiatives do have a significant impact on the Nepalese public sector revenue and consequent expenditure system. Liberalisation of health and education services began in the mid-eighties as a component of the structural adjustment program of the World Bank. Likewise, full convertibility of the current account and partial convertibility of the capital account and the relaxation of the price control in both factor and product markets appeared as a policy prescription of the Stabilization Program of the International Monetary Fund (IMF). Privatisation of state-owned enterprises initiated at the beginning of the 1990s. Furthermore, Nepal received the membership of the World Trade Organization, South Asian Free Trade Agreement (SAFTA) and the Bay of Bengal Initiative for Multi-Sectoral and Technical Cooperation (BIMSTEC) in the mid-2000s. Moreover, along with the adoption of the federal system of governance, revenue and expenditure flows have spread to three tiers of the government.

Several studies exist in measuring tax productivity in Nepal, VAT and other tax potentials. Examples include Acharya (2016a, 2016b, 2010). However, studies assessing the growth impact of these reform measures are absent, specifically the impact of tax rate changes on production and work incentives that eventually translate into the economy's growth performance. This study intends to fulfil this gap. The remainder of this paper runs as follows. Section 2 mentions the paper's objectives and methods, followed by data and observations in section 3. Section 4 presents the analysis and discusses the results. Section 5 concludes.

2 Objectives and Methods

This study reviews the budgetary reforms for the last three decades in light of the country's high growth potential. In this regard, it assesses the elasticity of various taxes in Nepal and explores the tax potentials of them. Furthermore, it explores the avenues that circumvent the combinations of tax and other variables that affect the economy's growth performance.

The major data used in this study are as follows:

- a. Total revenue series by various tax categories from the 1980s to the latest available
 - b. Time series databases of various tax types
- c. Reports of the public expenditure reviews of the government conducted in various periods
- d. Consistent time series data of the major macroeconomic variables, i.e. GDP by sectors, growth rates, employment, domestic investment, capital formation, foreign direct investment, etc.

Broader methodological approach to this study has comprised:

- A. Review of the available methods in measuring the impact of the tax rate changes on economic growth,
- B. Include both short term dynamic relationship between revenue variables and GDP growth,
- C. Include other variables that impact GDP along with the revenue variables, and
- D. Keep revenue GDP ratio as a controlled variable while assessing the impact of the variations of different tax types on the economy's growth performance.

The study has conducted some econometric analysis that stemmed from the previous works by various researchers. Based on the best fit models on revenue vs growth diagnostics, the study has conducted some simulation analyses with the impact of an increase in public sector revenue on the overall growth performance of the economy. The government's revenue generation capacity is instrumental in funding priority investments and programs and institutes a simpler, fairer, and more efficient tax system in the developing economy.

Three methodological approaches exist in analysing the impact of tax rate changes on government revenue: tax multiplier approach, general equilibrium approach, and partial equilibrium approach. The tax multiplier approach uses the following model in assessing the impact of the tax rate change on Gross Domestic Product (GDP):

$$Y = a + b(1-t)Y - b(1-t)T_0 + b(1-t)tr + I + G, (1)$$

where Y, G, and I refer to GDP, government expenditure, and total investment, respectively. a, b, t, and tr are the autonomous consumption, marginal propensity to consume (MPC), tax rate, and transfer payment, respectively. T_0 is the fixed revenue.

Equation (1) can be solved as

$$Y = \frac{a - b(1 - t)T_0 + b(1 - t)tr + G}{1 - b(1 - t)}$$
(2)

Based on this three-sector model, the tax impact on GDP is measured using the tax multiplier and this can be expressed as follows:

$$K_{t} = \frac{-b(1-t)}{1-b(1-t)} \tag{3}$$

This multiplier approach in assessing the taxation impact on GDP concludes that taxation has a contractionary impact on output. The economic growth and revenue dynamics were initially modelled by Arnold et al. (2011).

$$\Delta Iny_{it} = -\emptyset_{i} \begin{pmatrix} iny_{it-1} - \beta_{1} Ins_{it}^{k} - \beta_{2} In h_{it} + \\ + \beta_{3} n_{it} + \sum_{i} \beta_{j} V_{it}^{j} - a_{it} \end{pmatrix} + \\ + b_{1i} \Delta Ins_{it}^{k} + b_{2i} \Delta Inh_{it} + b_{3i} \Delta n_{it} + \sum_{i} b_{ji} \Delta V_{it}^{j} + \varepsilon_{it}$$

$$(4)$$

In equation 4, y refers to GDP, s the ratio of investment to accumulated capital, h the average number of schooling of the working-age population, n the population growth rate, and V the tax policy variables.

The present study follows this modular framework with slight modification in line with that of Acosta-Ormaechea and Yoo (2012) that essentially follows Arnold et al. (2011). More specifically, we study the relationship as follows:

$$g_{t} = -\emptyset \begin{pmatrix} g_{t-1} - \alpha_{1}I_{t-1} - \alpha_{2}Inh_{t-1} - \alpha_{3}n_{t-1} - \\ -\alpha_{4}T_{t-1} - \sum_{j=5}^{m} \alpha_{j} . TC_{t-1}^{j} \end{pmatrix} + \\ + \beta_{1}\Delta I_{t} + \beta_{2}\Delta lnh_{t} + \beta_{3}\Delta n_{t} + \beta_{4}\Delta T_{t} - \\ - \sum_{j=5}^{m} \beta_{j} . \Delta TC_{t}^{j} + \gamma . t + \varepsilon_{t}$$
 (5)

In the given equation g is the GDP per capita growth, I is the investment ratio, and h is the number of years of schooling, n is the population growth, T is the tax revenue as a share of GDP. TC is the vector of tax-composition variables expressed as a share of total tax revenue. The subscript t refers to a time in years and ε the error term.

The equation 5 has two broader components. The first, kept in the parenthesis that is also known as error correction term, captures the long-term relationship between growth and the explanatory variables. The variable T has been regarded as a control variable that is kept intact along with the variations of shares of different taxes in overall tax revenue. The second part, terms outside the parenthesis, measures short term dynamic effect of all the explanatory variables used in the model. This model measures the impact of tax policy change with revenue neutrality.

3 Data and Observations

This study uses the time series data for 44 years (1975/76–2017/18). The summary statistics of the variables used in the model are presented in Table 1. The average growth rate of the Nepalese economy has remained 4.5 per cent during this period, but it is fluctuating between –3 and almost 10 per cent. The population growth rate remained approximately 2.04 per cent.

Going to fiscal variables, the tax GDP ratio has been 9.5 per cent on average, but it was rather low (5.1 per cent) at the beginning but had been gradually increasing. It peaked up to almost 22 per cent in 2017/18. In the revenue composition, the share of VAT in total tax revenue is highest (31%); this was 20 per cent at the beginning but has reached almost 38 per cent now. Likewise, the share of income tax to total tax is also increasing from six to 28 per cent. Contrary to this, the contribution of excise duties in total tax revenue has remained almost stable, around 13 per cent, with minor fluctuation, the standard deviation being 0.02. The trend is opposite in the case of customs duties; its share in total revenue is gradually declining significantly from the mid-2000s, mainly due to Nepal's accession to the World Trade Organization (WTO), South Asia Free Trade Area (SAFTA), and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Co-operation (BIMSTEC). During this period, contribution by import duties in total tax revenue declined from about 35 to 17 per cent.

Table 1
Summary of the major variables used in the study (1975/76-2017/18)

Variables	No of observations	Mean	Std. deviation	Minimum	Maximum
GDP growth rate	43	4.715	4.539	-3.00	9.700
Population growth rate	44	2.036	0.405	1.350	2.660
Tax GDP ratio	44	0.095	0.041	0.051	0.219
VAT to total tax ratio	44	0.312	0.037	0.200	0.376
Import tax to total tax ratio	44	0.251	0.049	0.170	0.346
Excise duties to total tax ratio	44	0.132	0.022	0.084	0.158
Income tax to total tax ratio	44	0.159	0.065	0.056	0.278
Annual rate of inflation (%)	44	8.655	4.505	-0.700	21.10
Capital formation to GDP ratio	44	0.203	0.043	0.120	0.340
Rate of investment growth	44	0.254	0.088	0.134	0.518

In the 44 years covered by the study, the average inflation rate remained approximately nine per cent, ranging from 4.5 to 21 per cent. The capital formation to GDP ratio remained around 20 per cent, and the annual growth of investment around 25 per cent.

4 Results and Discussions

The results as presented in Table 5 show the relative effectiveness of different taxes on economic growth. We start with Arnold (2011) model (equation 4), more specifically, the version adopted by Acosta-Ormaechea and Yoo (2012) (equation 5) and make its extension/adjustment with the inclusion of some other variables that reveal more explanatory power in case of Nepal as presented in Table 2. Firstly, we develop a baseline scenario and make some simulation analysis. The variables used in the model belong to four different categories: dependent variable, independent variables, control variable, and policy variables. For the details regarding dependent, independent, control, and policy variables, please see Appendix A1.

The growth rate of GDP is the dependent variable in all the models used. Moreover, there are several independent, control, and policy variables in the model. Change in investment GDP ratio, change in capital expenditure to total expenditure ratio, change in population growth rate, change in tax GDP ratio, change in the share of income tax to total tax revenue, change in the share of

import duties to total tax revenue, change in the share of excise duties to total tax revenue, change in the share of VAT to total tax revenue, time variable, GDP growth rate, investment growth rate, capital expenditure to total expenditure ratio, population growth rate, the ratio of income tax revenue to total tax revenue, the share of import duties to total tax revenue, the share of excise duties to total tax revenue, and share of valueadded tax to total tax revenue are the independent variables. Likewise, the tax revenue GDP ratio is the control variable in the simulation scenarios. We are trying to explore whether changes in the growth rate of revenue of a particular tax type, keeping the tax revenue ratio unchanged from the natural change, would contribute to higher economic growth. Three simulation scenarios are developed in this regard:

No change in the income tax and excise duties, but additional tax effort is from value-added tax. In this case, the trend of the growth of import duties is also expected from value-added tax (simulation 1)

No change in the import duties and value-added tax, but additional tax effort is from income tax. In this case, the trend of the growth of excise duties is also expected from the income tax (simulation 2)

Additional revenue generation is expected from value-added tax and income tax; the growth trends of import duties and excise duties are merged to that of VAT and income tax, respectively (simulation 1 + simulation 2).

Table 2
Growth and tax revenue composition correlates (Dependent variable GDP growth rate)

Independent variables	Arnold and Acosta/Yoo model	Baseline scenario (Present study model)	Simulation 1	Simulation 2	Simulation 3
ΔΙ	-25.09 (-0.91)				
CapExTotExRtCh		16.56 (1.17)	7.65 (0.52)	20.16 (1.41)	7.40 (0.49)
Δn	-9.22 (-0.44)	-1.53 (-0.08)	5.60 (0.26)	-13.53 (-0.73)	5.28 (0.24)
ΔΤ	-356.86 (-3.45)***	-386.1 (-4.24)***	-360.35 (-3.68)***	-387.17 (-4.16)***	95.07 (1.47)
ΔITs	14.87 (0.32)	45.17 (1.08)	-35.34 (-0.75)		253.45 (0.19)
ΔImpDs	96.62 (1.94)*	114.83 (2.32)**		109.62 (2.17)**	
ΔExcDs	108.07 (1.67)*	133.02 (2.04)**	53.23 (0.89)		
ΔVATs	65.02 (1.28)	91.47 (1.72)		77.61 (1.45)	344.81 (0.25)
t	-0.187 (-0.61)	-0.132 (-0.45)	-0.097 (-0.30)	-0.27 (-0.95)	-0.105 (-0.32)
G(t-1)	-0.406 (-3.43)***	-0.411 (-3.64)***	-0.387 (-3.19)**	-0.369 (-3.31)***	-0.388 (-3.11)**
I(t-1)	39.1 (0.87)				
CaExp/TotEx(t-1)		16.94 (1.61)*	14.28 (1.26)	14.83 (1.39)	13.60 (1.15)
n(t-1)	6.94 (1.06)	0.58(0.11)	4.30 (0.76)	-0.196 (-0.04)	0.598 (0.11)
T(t-1)	86.56 (1.31)	65.52 (1.11)	97.85 (1.59)	94.32 (1.67)*	4.11 (0.71)
Its(t-1)	-113.97 (-2.24)**	-27.36 (-0.43)	-97.09 (-1.58)	30.57 (-0.46)	-96.89 (-1.54)
ImpDs(t-1)	202.61 (-2.95)***	-148.16 (-2.18)**	-252.29 (-4.58)***	-153.45 (-2.21)**	-250.30 (-4.42)**
ExcDs(t-1)	-144.21 (-1.81)*	-74.78 (-0.99)	-159.23 (-2.22)**	-108.38 (-1.47)	-157.45 (-2.12)**
VATs(t-1)	95.66 (-1.75)***	-29.41 (-0.54)	-94.33 (-1.87)**	-39.08 (-0.71)	-91.44 (-1.73)*
Constant	98.11 (2.46)**	56.54 (1.27)	114.83 (2.89)***	68.53 (1.53)	114.34 (2.81)***
Simulation policy variables					
ImpToVAT			11.63 (0.27)		-331.03(-0.25)
ExcToIncTx				62.88 (1.42)	53.96 (0.86)
R^2	0.73	0.75	0.69	0.73	0.70
Adjusted R ²	0.56	0.69	0.52	0.58	0.51

Note: Figures in parentheses are corresponding t-values of the coefficient estimated. *, **, *** refer to the level of significance at 10, 5, and 1 per cent, respectively.

Control variable

T(t-1) = tax revenue GDP share of the previous year

Policy variables (introduced in simulations)

ImpToVAT = share of import duties to total tax revenue merged into VAT to total tax revenue share

ExcToIncTx = share of excise duties to total tax revenue merged into income tax to total tax revenue share

Even more significant variable affecting economic growth is investment growth. Moreover, the past year's investment also affects the overall GDP growth of the current year. Once the higher economic growth rate is attained, it supports the growth rate to go up in the following years as well, as shown by the solid positive time variable.

Among the tax variables, they are causing contraction in the economic growth rate. Only in the case of value-added tax, the impact on the growth rate is expansionary. It should be understood cautiously. The value-added tax may not directly contribute to raising the growth rate, but in a higher growth spiral, the VAT collection also rises due to increased turnover in the market.

The models presented are found accepted as the residuals left are found fully stochastic in nature. Please refer to **Appendix 2A**.

5 Conclusion

The study applied an econometric model in measuring the short-term dynamic relationship as well as the long-term association between revenue and growth performance of a typical developing economy. Taking the case of Nepal, additional tax revenue generation effort does not prove to be growth-enhancing. Rather, it has a contractionary effect on GDP. However, to examine the effects of raising the revenue from a particular tax type on GDP growth, we made the tax revenue to GDP ratio intact and developed three different scenarios. To put it in other words, series of revenue replacement scenarios are developed. First, we implement a scenario of no change in the income tax and excise duties, but additional tax effort is from value-added tax. In this case, the trend of the growth of import duties is also expected from value-added tax. Second, we implement a scenario with no change in the import duties and value-added tax, but additional tax effort is from income tax. In this case, the trend of the growth of excise duties is also expected from the income tax. In the third effort, we combine the two scenarios, i.e. additional revenue generation is expected from value-added tax and income tax; the growth trends of import duties and excise duties are merged to that of VAT and income tax, respectively.

The study concludes that Nepal's tax GDP ratio is on a higher side; therefore, any further effort to raise additional tax generates contractionary effects. The three different scenarios of revenue replacement developed also do not prove to be productive in making a significant impact on GDP growth. However, raising the revenue share from import duties and revenue replacement of excise duties by additional income tax reveals some positive impact on economic growth. Raising the share of import duties might have worked positively to economic growth due to the import of capital goods and intermediate imports rather than the import of final consumption goods/services.

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Appendix:

Appendix A1: Variables in the model

In the given linear regression models, the GDP growth rate is the dependent variable. The followings are the independent, control, and policy variables used in the model:

Independent variables:

 ΔI = change in investment GDP ratio

CapExTotExRtCh = change in capital expenditure to total expenditure ratio

 Δn = change in population growth rate

 ΔT = change in tax GDP ratio

 ΔITs = change in the share of income tax to total tax revenue

 Δ ImpDs = change in the share of import duties to total tax revenue

 Δ ExcDs = change in the share of excise duties to total tax revenue

 Δ VATs = change in the share of VAT to total tax revenue

t = time variable

G(t-1) = GDP growth rate of previous year

I(t-1) = investment growth rate of the previous year

CaExp/TotEx(t-1) = capital expenditure share in total expenditure of the previous year

n(t-1) = population growth rate of the previous year

Its(t-1) = income tax revenue share in total tax revenue of the previous year

ImpDs(t-1) = Import duties share in total tax revenue of the previous year

ExcDs(t-1) = Excise duties share in total tax revenue of the previous year

VATs(t-1) = Value added tax share in total tax revenue of the previous year

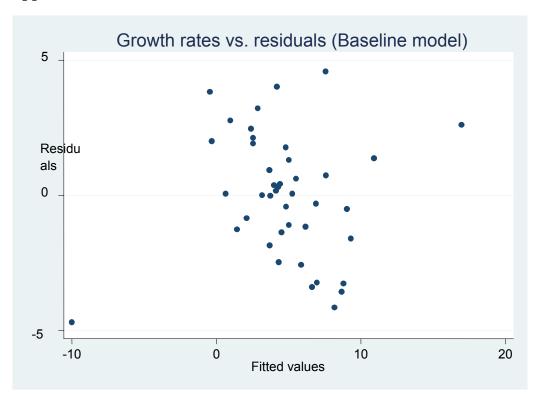
Control variable

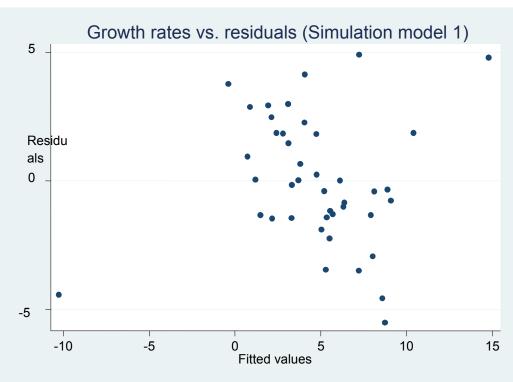
T(t-1) = tax revenue GDP share of the previous year

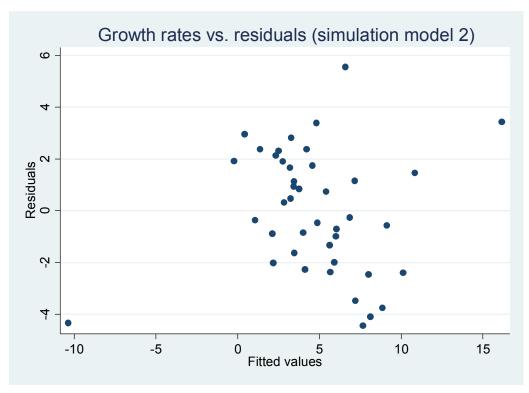
Policy variables (introduced in simulations)

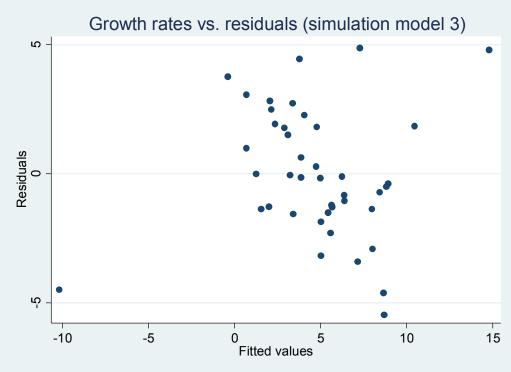
ImpToVAT = share of import duties to total tax revenue merged into VAT to total tax revenue share ExcToIncTx = share of excise duties to total tax revenue merged into income tax to total tax revenue share

Appendix A2: Residual Plots









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Влияние повышения налоговых ставок на рост ВВП Непала

Санджая Ачарья

RNJATOHHA

Данная работа представляет собой проверку гипотезы существования вероятности того, что различия в налоговых условиях разных типов могут оказать положительное влияние на экономический рост в странах с развивающейся экономикой. Автор проанализировал данные временных рядов о росте и фискальных переменных за 44 года (1975–2018 гг.) в Непале. В результате исследования он пришел к выводу, что Непал уже достиг оптимального соотношения налогов к ВВП и дополнительные усилия по сбору налоговых поступлений будут в дальнейшем контрпродуктивны. Опираясь на результаты исследования, автор указывает на необходимость защиты этой небольшой развивающейся экономики и непальских зарождающихся отраслей от фискального роста и предлагает руководству Непала принять некоторые другие структурные меры для обеспечения более высоких темпов роста ВВП.

Ключевые слова: налоговые ставки; доходы государственного сектора; рост ВВП

ОБ АВТОРЕ

Санджая Ачарья — экономист по вопросам развития и внештатный консультант из Катманду (Непал); приглашенный научный сотрудник Южноазиатского института перспективных исследований (Катманду). Защитил докторскую диссертацию по экономике в Университете Хоккайдо (Саппоро, Япония, март 2006 г.). Имеет диплом Университета Эразма (Роттердам, Нидерланды, ноябрь 2006 г.). Его вторая докторская диссертация, защищенная в Роттердаме, была признана лучшей в рамках университетского конкурса. Имеет также звание магистра экономики развития Международного института социальных исследований (ISS, Нидерланды) и диплом о завершении постдокторского исследования JSPS в Университете Хоккайдо (Япония, 2008 г.).

Assessing Factors Affecting FDI in Developing Asian Countries

Parul Gupta

ABSTRACT

The paper focuses on various factors that affect the inflow of Foreign Direct Investment in developing countries. The study majorly deals with Asian countries, namely India, China, Myanmar, Nepal, Pakistan, Bangladesh and Bhutan, that are progressing from being aid-dependent to trading giants. The factors affecting FDI are majorly categorised into dependent and independent variables. Here, in this study, the dependent variable considered is FDI inflow, and independent variables are market size, the value of the currency, export, import, gross fixed capital formation, GDP deflator, cost of borrowing and economic reforms. Pooled Ordinary Least Square (OLS), fixed effect and random effect regression analysis is done to ascertain the best regression model and various tests are performed to check the intensity of effect caused by each independent variable on our dependent variable.

Keywords: Foreign Direct Investment (FDI); Gross Domestic Product (GDP); Ordinary Least Square (OLS); Gross

Fixed Capital Formation (GFCF) JEL Classification: G11, G15, G31

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1 Introduction

World Bank has succinctly defined FDI as "the net inflows (or outflows) of investment to acquire a lasting management interest in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings and other long terms as well as short term capital as mentioned in the balance of payments."

FDI gained attention in the international economy after World War II. Numerous studies have been laid so far for an enhanced understanding of economic mechanisms and behaviour of economic agents at both micro and macro levels. FDIs are promoted by relatively open economies that are ready to welcome not just capital investment but technology and management also as FDI's are categorised by ownership control of the business enterprise.

According to The Financial Times, "Control of management, technology and other crucial inputs can confer de facto control".

United Nations Conference on Trade and Development (UNCTAD) said, "South Asia recorded a 10% increase in FDI to \$ 60 billion. The growth was driven by India, with a 16 per cent increase in inflows to an estimated \$ 40 billion registering itself among the top ten recipients of overseas investment. The majority went into services

industries, including information technology." "Among developing economies, the Asia- Pacific region received the largest share of global FDI inflows attracting 45 per cent in 2018. Developing countries in the region attracted 40 per cent of global FDI inflows, converted into 88 per cent of total Asia- Pacific region inflows. Over the past decade, the share of intra-region greenfield inflows increased from 40 to 45 per cent. East and North-East Asia accounted for 66 per cent of all intra-regional greenfield FDI outflows."

The factors affecting FDI differs with both longitudinal and latitudinal changes. As conditions across countries vary, how they attract FDI also changes depending on the initial economic development, regulatory terms and conditions and quality of its working institutions. Hence, the study aims to determine factors affecting FDI inflow in developing Asian countries with varied objectives.

The objectives are as follows:

To examine factors affecting FDI inflow

To study the impact of reforms on FDI inflow

To figure out the best regression technique for the purpose of the study and provide relevant suggestions focusing on the promotion of FDI inflows in these countries.

The study comprises Section 1 Introduction, Section 2 Literature Review, Section 3 Data, Meth-

odology and Analysis, and Section 4 that includes Conclusion with the further scope of the study.

2 Literature Review

There exist various theories and studies that try to explain FDI inflow in any country and its trends and impact on the economy.

Hymer (1960) highlighted the issues related to barriers to entry like uncertainty, risk nationalism of host country, legal system and protectionist outlook of the nation for a firm which is keen to set up production abroad and Dunning (1997) introduced the world with the concept of "eclectic paradigm" also known as ownership, location, industrialisation model which companies follow to ascertain whether pursuing FDI is beneficial or not.

Quazi (2004) investigated the factors that drive FDI into countries of the South Asian continent: India, Pakistan, Nepal, Bangladesh, and Sri Lanka, where factors could be economic or non-economic. Quazi used economic freedom as one of the variables affecting FDI inflow which acts as a substitute for the domestic investment climate. The panel regression equation estimation along with the generalised least square method with corrections for heteroskedasticity and autocorrelation found that political instability reduced inflows of FDI in a country, whereas all other factors like economic prosperity, economic freedom, economic openness, human capital, and lagged changes in FDI meaningfully increased FDI inflows.

Adhikary and Mengistu (2008) provided a clear view that a higher production standard of FDI holds simply when the host country exhibits a minimum quantity of human capital and adequate infrastructure along with macroeconomic stability, market size and extent of openness alongside exchange rate stability, lower production costs and investment incentives.

Athukorala (2009) mentioned in his work that "determinants affecting FDI inflows are diverse and there is no complete list of FDI determinants though it is usually observed that the most popular determinants are market size, potential growth of the market, the openness of trade, exchange rate volatility, clustering effects of firms, political stability, institution, taxes, trade restriction, trade effects, productivity, labour cost and infrastructure."

Mottaleba and Kalirajanb (2010/13) mentioned that by tying together the gaps of native savings

and investment and carrying the newest technology and management expertise from developing countries, FDI could perform a vital role in reaching rapid economic growth. The results from analysis of 68 countries for years 2005, 2006 and 2007 for over 8 variables were taken to infer variables critically affecting inflows of FDI in specific countries. The paper noted that small nations across the globe that are emergent could attract ample FDI just by embracing more outward focusing trade policy and proposing a more business welcoming environment in front of foreign investors.

Jha, Agarwal, Gupta, and Mishra (2012) analysed Bangladesh, Pakistan, India, Sri Lanka, Nepal and Maldives with parameters GDP, direct investment, trade openness, real effective exchange rate and labour is taken into consideration for years 1990–2010. The main tools of econometric analysis were Augmented Dickey Fuller test, Durbin Watson test and White test. The results were empirically defensible with the administrative and economic developments over 20 years. The adverse influence of labour on FDI was illuminated in the study.

Parashar (2015) investigated factors affecting FDI inflow in China and India over a stretch of 30 years from 1980–2013 using data on market size, infrastructure, trade openness, growth rate, policy changes, inflation and opportunity cost to investors collected from UNCTAD, World Bank, IMF, ILO database and Federal Reserve. Apart from the linear regression, the Dickey Fuller unit root test and Engel Granger co-integration test were performed to ascertain that market size and wage rate are the most important factors determining the flow of FDI. These are consistent with the market seeking and resource seeking hypothesis.

Huq, Khan and Rehman (2016) stressed more on Bangladesh while covering 4 other countries India, Nepal, Pakistan and Sri Lanka. They suggested that FDI is considered as one of the vital requirements for the overall development course of developing countries. The key concept of transmission mechanism was highlighted, and FDI was thought of as a contributor to economic development. FDI was thus seen as a reducer of poverty through preliminary macroeconomic stimulus and raiser of total factor productivity and efficiency of resource use in recipient economy through transmission mechanism which works between FDI and poverty reduction.

Imtiaz and Bashir (2017) recognised FDI as one of the key funding sources for long-term maintainable economic advancement in developing countries. The conceptualisation of economic freedom as a provider of better investment climate important for foreign firms and MNC"s was done in which freedom referred to no constraint, burden or obligation in choice or exchange or transfer of personal assets. The panel data fixed and random effect model were used along with the Hausman specification test to analyse heterogeneity. Further, correlation analysis was conducted to identify the strength of linear association among the variables.

Rasheed (2019) studied 14 Asian countries from 2003–2017 to analyse the relationship between FDI and macroeconomic factors using panel data technique. The study concluded that macroeconomic indicators significantly affected FDI inflows in China, Hong Kong, Indonesia, Jordan, Pakistan, the Philippines, and Vietnam and revealed that trade openness and exchange rate are decisive economic indicators to attract FDI towards the economies.

3 Data, Methodology and Analysis

The World Bank published the data for conducting the study we collected from various datasets for 39 years. Data can be viewed as unbalanced panel data for the purpose of study where an unbalanced panel is defined as a dataset in which at least one-panel member is not observed every period; therefore, with N panel members and T periods, strict inequality holds for the number of observations n in the dataset: n < N*T.

About the Countries

INDIA. A developing economy, 3rd largest by Purchasing Power Parity (PPP), 5th on world economy chart and ranked 142nd on the basis of nominal GDP and per capita income basis respectively. India attracted a total of \$58.37 billion from April to November 2020, which accorded for the highest FDI inflow in a span of 8 months in a single financial year and showed a 22 per cent hike compared to the first eight months of the financial year 2019–20. Socialist cum politicians or politicians inspired by socialists has been the driving force of economic development since independence, including sector's state ownership. With the introduction of fundamental reforms and their renewals from

1991 onwards, India progressed to become a free market economy. IMF says that India can touch a level of 10 per cent if reforms are rightly pushed and with states taking utmost responsibility for the respective economies.

CHINA. Economy market a transition from centrally planned to market orientation. Apart from being 2nd leading economy in terms of GDP and largest by PPP, China is one of the world's most recklessly growing economies with 6 per cent growth rate over the past 30 years. Being in 4th and 11th position in terms of inward and outward FDI, China tops the leading developing economies. A high growth base lies under resource-intensive exports and manufacturing and availability of labour at low cost. Reduction in economic, environmental and social imbalance has shifted structure from low to high-end services and manufacturing and a shift to consumption from investment.

MYANMAR. A lower-middle income country with US \$ 1,210 as its GNI per capita, an agriculture-based economy with the least development, having maximum population involved in agricultural pursuits directly. Here FDI started in 1973, and in 1988 military coup encouraged indigenous and private enterprise. The moderate growth is driven by a strong performance by the telecom industry and domestic trade along with relatively slow growth of the construction, manufacturing, and transport sector.

NEPAL: Economic development in the country became more complicated due to political scenarios and rising corruption. Till 1951 people of Nepal faced deprivation of even the basic amenities, gradually in the late 1950s, the country made a progressive walk towards sustainable growth. By 1983 Nepal engaged itself in an investment protection agreement with various counties. Opening the country towards economic liberalisation with a perspective of economic growth and improved standard of living was a major step taken by the government of Nepal. Capacity in hydroelectricity played an important role in driving the economy. To promote FDI in the county government entered into double taxation agreements to avoid them with least 10 countries starting from 2000.

PAKISTAN. It is a semi-industrialised economy centralised along the Indus River, and exports being primarily based on commodities like leather goods, sports goods, textiles, chemicals, medical instruments and rugs. Removal of barriers to en-

Table 1 Country wise sample size

No	Country Name	Period	No. of years
1	India	1982-2020	39
2	China	1982-2020	39
3	Myanmar	1982-2020	39
4	Nepal	1982-2011	26
5	Pakistan	2004-2020	17
6	Bangladesh	1982-2020	39
7	Bhutan	2006-2020	17
Total	7		216

Note. Data for years 1992-1995 is missing for Nepal due to unavailability of appropriate data.

Source: The author.

courage a free flow of capital and FDI was done to the extent of 100 per cent equity participation in many sectors, unlimited payment of profits, service fees, dividends and capital was made. Though doing business was getting easier but problem due to corruption, political instability and domestic insurgence worsened the conditions.

BANGLADESH. Economic with 39th position in nominal terms and 29th in PPP, it is strategically important to provide maritime access for landlocked regions, mainly Bhutan, Nepal, India, and potential gateway for China's landlocked areas. It is a house for major real estate investments. It saw expansion in the education system and food production and the development of technological and industrial bases and rose out of poverty. With the commencement of the mid-1990s, commitment towards the free market was observed by successive governments, privatisation of enterprise owned by the state, channelisation of investment and various banking reforms were seen.

and smallest economies, where agriculture and forestry play the most important role in fetching livelihood to around 60 per cent of the population. The major contributor of the overall growth rate here is exports of hydropower to its major market India supported by fiscal policies and monetary policies facilitating macroeconomic stability, characterised by lower rate of inflation, consistently steady exchange rate and accumulation of international reserves. The tremendous progress by reducing extreme poverty, gender equality promotion, and attention towards inequality issues

adds to the country's progress. The philosophy of the country guides its development as given by Gross National Happiness (GNH). Hydropower development's ideal condition, i.e., abundance of water resources spurred growth and revenue generated from it helps in financing a large number of investments for the development of human capital in the country.

About the Variables

The secondary data is collected for the purpose of the study. We studied various variables to ascertain how changes in independent variables affect dependent variables.

Dependent variable: The variable that is tested and experimentally measured is known as a dependent variable. Here, the Inflow of Foreign Direct Investment is a dependent variable. These investments serve the interests of various investors putting their money in company or businesses in some distinct nations.

Independent variables: These variables can be controlled and changed to test the impact on a dependent variable.

- 1. Gross Domestic Product (GDP) is an indicator for depicting market size, which provides us with some understanding in accordance with endogenous growth theory stating that nation with large market size nurture faster-seeking benefits from economies of scale. Higher GDP or GDP growth rate attracts more FDI than the ones that are having a slow or stagnant growth rate.
- 2. Exports of goods, services and primary income are an important component of interna-

Table 2
Measurement units of the variables

No	Name of Factor	Variable	Measuring unit
1	FDI Inflow	FDI	Current million USD
2	Market size	GDP	Current million USD
3	Value of currency	Exchange rate	LCU per USD
4	Trade	Exports	Current million USD
5	Trade	Imports	Current million USD
6	Infrastructure	GFCF	% of GDP
7	Inflation	GDP deflator	Percentage
8	Cost of borrowing	Interest rate	Percentage
9	Economic reforms	Reforms	

Note. Log of GDP and exchange rate is used for better results that are more efficient and reliable.

Source: The author.

tional trade that offers a wider market to people and firms. Exporting to foreign markets generally decreases the unit cost of production, results in increased experience and knowledge, which may even facilitate the discovery of new marketing practices, technologies, and insights.

- 3. Imports of goods, services and primary income are other components of international trade. When countries are unable to produce cheaply and efficiently, they import goods from other countries. Apart from a finished product, raw materials that are unavailable in domestic countries are imported.
- 4. Gross Fixed Capital Formation (GFCF), also referred to as the net investment, measures the net increase in fixed capital, namely infrastructure by increased construction of railways, commercial buildings, residential dwellings, roads, and improvement of land. Building of capital-intensive assets requires a huge amount of sunk cost which gets recovered by the inflow of FDI in heavy amount.
- 5. Inflation rate is a quantitative measure at which the average price level of goods and services increases over time. It indicates a decrease in the PPP of the nation's currency. An ideal level of inflation is needed to encourage spending instead of savings, thereby nurturing economic growth.
- 6. Interest rate of any country plays a dynamic role in attracting inflows. It is paid when borrowings are made and received when a certain amount is saved. The fall in an economy's interest rate attracts more and more investors from the

foreign base as they receive higher returns from the investment made.

7. Exchange rate accounts for an inverse relation with FDI. Though most studies

show a significant relationship between both, many studies contradict it. The ambiguous result is an outcome of the home country's currency, which leads to appreciation or depreciation of the recipient country's currency and its exchange rate.

8. Reforms played a vital role in determining inflows of FDI. It facilitated the liberalisation of FDI by waiving off restrictive conditions and obligations. The economic reforms of 1991 played a significant role in the economies of Asia. With the clear purpose of rapid industrialisation, elimination of industrial licensing, permission for foreign investment, encouragement to private and public sectors was done by the government. The main aspects of the reforms are Liberalisation, Privatisation and Globalisation.

The unit of measurement of all the variables used can be seen as under. In regression, analysis names are used according to the variable (not the name of the factor).

Economic and Econometric Models

The economic model suggests, inflows of FDI are a function of economic factors and can be written as FDI = f (Economic factors). The econometric model suggests inflows of FDI is a dependent variable. In contrast, GDP, exports, imports, gross fixed capital formation, interest rate, GDP

Table 3

Descriptive Statistics of variables

Variable	Mean	SD	Min	Max
FDI	19500	54000	-16.6	291000
GDP	25.06	2.42	20.58	30.24
Exchange rate	3.26	1.27	0.63	7.26
Exports	192000	542000	215	2890000
Imports	188000	497000	406	2830000
Gross FCF	26.12	11.22	9.48	68.02
Inflation	8.63	7.70	-1.26	57.68
Interest rate	3.19	6.30	-31.50	14.82
Reform	0.75	0.43	0	1

Note. FDI, exports and imports are in 100 thousand million dollars. Also, SD stands for standard deviation and min, and max refers to the minimum and maximum value, respectively.

Source: The author.

deflator, exchange rate and reforms are independent variables or explanatory variables. The following two models are studied for the purpose of the study:

Model 1

FDI = β 0 + β 1(GDP) + β 2(exchange rate) + + β 3(exports) + β 4(imports) + β 5(GFCF) + + β 6(interest rate) + β 7(inflation) + μ

Model 2

FDI = β 0 + β 1(GDP) + β 2(exchange rate) + + β 3(exports) + β 4(imports) + β 5(GFCF) + β 6(interest rate) + β 7(inflation) + β 8(reforms) + + μ

Methodology

Panel data is a combination of both time-series and cross-sectional data. In this behaviour is observed of entities across time. There are two significant benefits of using panel data.

First, panel data assures more reliable estimates of the parameters as it allows controlling those unobservable factors that may vary across units but not the time or may vary across time but not units.

The second benefit relies on the fact that identification and effects" measurement is possible in panel data. It is facilitated by the usage of different methods of analysis. These are the random effect regression model and fixed effect regression model.

Basic panel data analysis is POOLED OLS estimation, which is the easiest and simplest estimation method that allows pooling of observations over time and running OLS. In this, every observation is treated as a separate entity.

FIXED-EFFECT model is used for the analysis of the impact of variables that change over time. It explores the relationship between variables in an entity. FE removes the effects created by time-invariant characteristics of variables so as to create access to net effects on outcome variable by predictors.

RANDOM-EFFECT model relies on the rationale that variations across entities are assumed to be uncorrelated and random. The advantage of using RE is that the time-invariant variables can be included, and these effects are not absorbed by intercept as in the case of FE. This model assumes error terms being uncorrelated with predictors allowing time-invariant variables" role as an explanatory variable. It allows for the generalisation of inferences further than the sample used.

The first thing to look at is a descriptive analysis of the variables. The table below represents the basic statistics of all the variables.

Each variable included consists of 216 observations for the panel of 7 developing Asian countries. Next, the Fisher Type Unit Root Test, developed by Maddala and Wu (1999), is used to test stationarity in panel data when the data used is unbalanced. Based on the p — values generated

by Dickey- fuller unit root test on each panel, the test assumes the following hypothesis, where

Null Hypothesis: Ho: pi = 1 for all i, implies that all panels contain unit roots.

Alternative Hypothesis: Ha: |pi| < 1 for at least one i for finite N.

Here exchange rate, inflation and interest rate have an order of integration 0 and follows I(0), whereas FDI, GDP, exports, imports, gross FCF and reforms follow I(1) as they have an order of integration 1.

We undertake correlation analysis in order to check the strength of linear association of variables with each other. Results of correlation analysis revealed that there is a very strong positive correlation between FDI and exports and FDI and imports as value approaches near 1. A moderately strong positive correlation is observed between FDI and GDP. Apart from this, FDI is positively correlated with gross FCF and reforms. A negative correlation is seen amongst FDI and exchange rate, FDI and inflation and FDI and interest rate.

Since the correlation of independent variables is less than 0.80, it can be inferred that there is multicollinearity between the independent variables, which implies that collinearity will not have an impact on the results of the regression.

Similar can be observed graphically in *Figure*.

Regression Analysis

Coefficient values mentioned above are in hundred thousand million USD apart from exports and imports for which it is 0.0001 thousand million USD.

Table 6 shows that Pooled OLS and Random — effect regression analysis results are similar, and fixed-effect regression results are different from them. The model accounts for the relationship of FDI inflow with GDP, exchange rate, exports, imports, gross FCF, interest rate and inflation.

Table 7 shows the results of model 2, which comprises all the variables as in model 6 and reform as an additional variable.

Coefficient values mentioned above are in hundred thousand million USD apart from exports and imports for which it is 0.0001 thousand million USD.

The overall value of R², which provides insight of goodness of fit of any model, is a greater for model 2 as compared to model 1 in all the regression techniques signifying model 2 explains a greater

Table 4
Fisher-type unit root test

Variable	p — value at level	p — value at 1st difference
FDI	0.5594	0.00 ***
GDP	0.9443	0.00 ***
Exchange rate	0.0026 ***	-
Exports	0.5274	0.00 ***
Imports	1.00	0.00 ***
Gross FCF	0.6864	0.00 ***
Inflation	0.00 ***	-
Interest rate	0.00 ***	-
Reform	0.9589	0.00 ***

^{***} p < 0.01 (1% level of significance), ** p < 0.05 (5% level of significance), * p < 0.1 (10% level of significance).

Source: The author.

amount of variations caused by independent variables in our dependent variable. This greater value implies that our additional variable, i.e., reforms accounts for a significant impact over dependent variable FDI inflows. Apart from observing the value of R² for ascertaining the best model, diagnostic tests are performed to specify which method of regression will enable us to draw the best result.

Hausman Specification Test. The test is used to determine whether the fixed effect model or random effect model is best for regression. The test compares an estimator which is known to be consistent with an estimator that is efficient under the assumption being tested.

Null Hypothesis: Ho: The difference in coefficients is not systematic.

Alternative Hypothesis: Ha: Difference in coefficients is systematic.

Our null hypothesis that difference in coefficients is not systematic, i.e., the model is random effect model is rejected as the probability is lesser than 0.05. It implies that fixed effect regression suits better to the model.

Testing for Time Fixed Effect. Testparm command is run to ascertain whether time fixed effects are needed over fixed effect regression model. It

^{***} indicates that the null hypothesis is rejected at 1% level of significance, implying that at least one panel is stationary and exhibits no unit root.

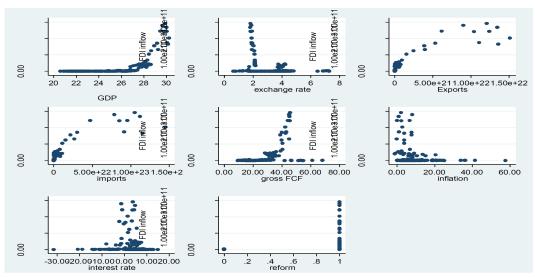


Fig. Graphical representation of a correlation

Table 5
Correlation Analysis

Variable	FDI	GDP	Exchange rate	Exports	Imports	Gross FCF	Inflation	Interest rate	Reform
FDI	100								
GDP	0.61	1.00							
Exchange rate	-0.29	-0.13	1.00						
Exports	0.91	0.49	-0.25	1.00					
Imports	0.89	0.49	-0.24	0.79	1.00				
Gross FCF	0.46	0.29	0.05	0.38	0.37	1.00			
Inflation	-0.20	-0.3	-0.25	-0.18	-0.17	-0.42	1.00		
Interest rate	-0.05	0.12	0.34	-0.03	-0.03	0.29	-0.76	1.00	
Reform	0.20	0.21	0.37	0.14	0.14	0.29	-0.12	0.07	1.00

Source: The author.

sees if the coefficients are jointly equal to zero for all the years or not.

Null Hypothesis: Ho: Coefficients are jointly equal to 0 for all the years.

Alternative Hypothesis: Ha: Coefficients are equal to 0.

Since probability is less than 0.05 null hypothesis can be rejected, which means that coefficients are not jointly equal to 0 for all the years, implying that time fixed effects are essential.

Breusch Pegan Lagrange Multiplier Test. This test helped to decide between the random effect regression model and pooled OLS regression model. It checks whether variance across entities is zero or not.

Null Hypothesis: Ho: Pooled OLS regression model is appropriate.

Alternative Hypothesis: Ha: Random effect model is appropriate.

Since probability is 1, we cannot reject the null hypothesis, concluding that pooled OLS model is more appropriate.

Comparison of Models

Initially, for choosing between the two models that is model 1 showing the relationship between FDI

Table 6
Results of pooled OLS, fixed- effect and random- effect regression for model 1

Independent variable	Pooled OLS	Fixed- effect	Random- effect
GDP	3890***	12100***	3890***
	(589)	(2560)	(589)
Exchange rate	-1720*	-3700**	-1720*
	(1010)	(1730)	(1010)
Exports	0.00475***	0.00432***	0.00475***
	(0.000476)	(0.000482)	(0.000476)
Imports	-0.000372***	-0.00034***	-0.000372****
	(0.0000552)	(0.000055)	(0.0000552)
Gross FCF	536***	263	536***
	(122)	(337)	(122)
Inflation	-696*	-118	-696*
	(360)	(424)	(360)
Interest rate	-1230***	- 507	-1230***
	(417)	(489)	(417)
Constant	-87000***	-286000***	-87000***
	(17200)	(58600)	(17200)
R ²	0.9091	-	-
(within)	-	0.8597	0.8499
(between)	-	-	0.9917
Adjusted R ²	0.9058	-	-
F-statistic	277.17	164.62	-
F (p-value)	0.00	0.00	-
Chi2 (p-value)	-	-	0.00
Observations	216	216	216
Countries	7	7	7

Notes

Standard errors in parenthesis.

and GDP, exports, imports, gross FCF, inflation and interest rate and model 2 showing the relationship between FDI and GDP, exports, imports, gross FCF, inflation, interest rate a reforms goodness of fit is compared which shows that R² is greater for model 2.

The choice between Pooled OLS, fixed effect and random effect regression model on the basis of the significance of variables is made. In Pooled OLS and random effect regression model, all our independent variable are statistically significant, and in fixed effect regression, only GDP, exchange rate, exports and imports are statistically significant in explaining the dependent variable FDI inflow. More variables are statistically significant in Pooled OLS and random effect regression model.

Hausman specification test suggests that fixed effect regression model should be considered over random effect regression model. By testing for the time fixe effect, it is ensured that the time fixed effect is important. And by BPL multiplier test results, we see pooled OLS method is more appropriate as compared to random effect regression. Considering

^{***} p< 0.01 (1% level of significance), **p< 0.05 (5% level of significance),

^{*}p< 0.10 (10% level of significance)

Table 7
Results of Pooled OLS, fixed- effect and random- effect regression for model 2

Independent variable	Pooled OLS	Fixed- effect	Random- effect
GDP	3670***	11400***	3670***
	(597)	(2960)	(597)
Exchange rate	-2690**	-3760**	-2690**
	(1130)	(1730)	(1130)
Exports	0.0047***	0.00433***	0.000047***
	(0.000474)	(0.000483)	(0.000474)
Imports	-0.00036***	-0.000342***	-0.000367***
	(0.0000521)	(0.0000551)	(0.0000549)
Gross FCF	479***	278	479***
	(125)	(339)	(125)
Inflation	-739**	-135	-739**
	(359)	(426)	(359)
Interest rate	-1200***	-511	-1200***
	(414)	(490)	(414)
Reform	6050*	1800	6050*
	(3140)	(3600)	(3140)
Constant	-80900***	-269000***	-80900***
	(17400)	(67800)	(17400)
R ² (within) (between)	0.9108	_	-
	-	0.8599	0.8529
	-	_	0.9908
Adjusted R ²	0.9071	-	-
F-statistic	246.37	143.5	-
F (p-value)	0.00	0.00	-
Chi2(p-value)	-	_	0.00
Observations	216	216	216
Countries	7	7	7

Notes

Standard errors in parentheses.

varied results, we conclude that fixed effect regression and pooled OLS regression suits better to the study conducted.

4 Conclusion

FDI plays an important role in amending economies of developing Asian countries, which raises the interest to know more about FDI and factors that greatly influence inflows of FDI. There exist many factors that affect FDI inflow, out of which here attempts are made to study a few, namely

market size, the value of the currency, trade, infrastructure, inflation, cost of borrowing and economic reforms with the help of data on variables GDP, exchange rate, exports, imports, gross fixed capital formation, GDP deflator, interest rate and reform of seven countries India, Chine, Nepal, Bhutan, Pakistan, Bangladesh, and Myanmar for the period 1982–2020.

The common variables significant in all the types of models and techniques are GDP, exchange rate, exports, and imports. Pooled OLS and random ef-

^{***} p< 0.01 (1% level of significance), ** p< 0.05 (5% level of significance), * p< 0.10 (10% level of significance)

fect showed the other variables gross FCF, interest rate, inflation, and reforms significant along with above 4.

Policymakers of developing Asian countries have taken various measures by far and surely need more initiatives to improve the influential tools of growth and development of economies of developing Asian countries. The increased need for attracting FDI is seen in the pursuit of sustainable growth and the belief that inflows of FDI result in growth automatically. However, FDI does not lead to automatic growth and requires huge absorption capacity to guarantee spillovers, policies and regulations that balance out rights of investors and public interest and active role of government in enhancing absorption capacity by harmonising economic, environmental, and social dimensions in accord with internationally recognised standards and principles.

5 Recommendations

- 1. Focus on liberalisation of the industrial sector by emphasising the openness of trade and integration of developing Asian countries with global economies for economic development has been proved as an asset for India and China. It needs an extension in other countries too.
- 2. Following more rigorous reforms like permitting percentage ownership rights under automatic route of FDI in manufacturing of the medical device, telecom and railways, increased cap on FDI in insurance and defence sector, increasing FDI threshold and relaxation of sourcing reforms.
- 3. Existence of significant intraregional FDI inflows, low labour cost, active governmental role in liberalisation, and FDI promotion and strategies in favour of controlled inflation in developing Asian countries are paying off well for these economies. To achieve higher goals of growth, these economies control on inflation is needed to a greater extent as increasing inflation has a negative impact on FDI.
- 4. A perfect balance of the public and private sector working together towards better implementations of economic reforms will surely head towards upgrading economies.
- 5. Conscious attempts to encourage emigrant investments by the strengthening of commercial and economic diplomacy are a must to be taken.
- 6. Control on corruption at the end of both government and citizens is one of the major concerns that can facilitate increased FDI inflows in these countries when controlled.

Table 8
Result of Hausman specification test

Chi ²	18.33
Prob > Chi ²	0.0055

Source: The author.

Table 9
Result of testing for time fixed effect

Chi ²	5838.23
Prob > chi ²	0.00

Source: The author.

Table 10 Breusch Pegan Lagrange multiplier test result

Chibar ²	0.00	
Prob > chibar ²	1.00	

Source: The author.

- 7. It is observed that the availability of adequate roads, transport system, power, and water is still a major concern in attracting FDI. A hefty amount of efforts from the government's end will play a vital role in enhancing growth.
- 8. A little relaxation of labour law can work wonders for these economies as stern labour laws discourage Greenfield FDI in the economies.
- 9. Other hurdles seen in developing Asian economies that need relation are high tariff barriers, red tapism to massive extent, excessive bureaucracy and perception barriers that require a close check as FDI inflows are affected negatively by them.
- 10. Policies like double taxation avoidance treaty, from the bucket of tax regime's main achievements of the Indian system, are needed. It boosts investors' level of confidence because the tax on dividends and corporate profits are disincentives for the investors.

6 Limitations

- 1. Since the data source is secondary; the data is unbalanced due to the non-approachability of some sources.
- 2. There is a scope of extension of sample size and a number of countries used in the study.
- 3. Hands can be extended towards FDI outflows also.
- 4. And, always, there is a scope of adding more variables.

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Assessment of factors affecting FDI in developing Asian countries — The dissertation work was aimed to determine the factors affecting FDI inflows in developing Asian countries. It concerns the countries that represent economies that are progressing from being aid-dependent to trading giants. Examination of factors, analysis of the impact of reforms and relevant suggestions were proposed along with the estimation of the best regression technique for the purpose of study for 1982–2018.

Analysing GDP of India — The research project aimed to analyse how different sectors (Agriculture, forestry and fishing; Mining and quarrying; Manufacturing; Electricity, gas and water supply; Construction; Trade, hotels, transport and communication; Financing and real estate and Community, social and personal services) in the economy of a nation contributes in the GDP calculated at factor cost, i.e., GDP and how GDP at factor cost changes over time, based on the past and present behaviour of itself and other sectors contributing towards it.

Overview of GDP of India and factors affecting it — The study uses quantitative methodology and secondary time series data for the period 1999-2014. The ordinary least squared (OLS) method is used to regress GDP, which is the proxy for economic growth on agriculture, industries, services, export, import, and money supply and establishes a meaningful relationship.

Impact of Oil and Non-Oil Exports on Nigerian Economy — The study examines the impact of oil and non-oil exports on the Nigerian economy post-1980s. It reviews and compares these sectors' contribution to Nigeria's GDP over the years and the reason for that pattern and level of performance.

Analysing the Impact of Reliance Share Prices and Crude Oil on Nifty — The study examines the relationship between Nifty50 and Crude Oil as the Dependent and Independent variable, respectively, in the stock market.

Moreover, the relationship is examined when another independent variable: Reliance has been added to make the model multivariate. The direction and magnitude of impact that it brings to the model was investigated. **Area of interest:** data analysis, financial analysis, research and development, management and public relations, credit portfolio analyst.

Оценка факторов, влияющих на ПИИ в развивающихся странах Азии

Парул Гупта

АННОТАЦИЯ

В статье рассматриваются различные факторы, влияющие на приток прямых иностранных инвестиций в Индию, Китай, Мьянму, Непал, Пакистан, Бангладеш и Бутан, а также в другие азиатские страны, которые постепенно превращаются в индустриальные и торговые гиганты. Факторы, влияющие на ПИИ, в основном подразделяются на зависимые и независимые переменные. В данном исследовании в качестве зависимой переменной рассматривается приток прямых иностранных инвестиций, а независимыми переменными являются размер рынка, стоимость валюты, экспорт, импорт, валовое накопление основного капитала, дефлятор ВВП, стоимость заимствований и экономические реформы. Объединенный обыкновенный метод наименьших квадратов (OLS), регрессионный анализ с фиксированным и случайным эффектами, а также различные тесты проводятся для определения лучшей регрессионной модели и проверки интенсивности эффекта, вызванного каждой независимой переменной на зависимую переменную.

Ключевые слова: прямые иностранные инвестиции (ПИИ); Валовой внутренний продукт (ВВП); обычный метод наименьших квадратов (OLS); Валовое накопление основного капитала (ВНОК)

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IPO, Private Capital? Not! SPAC!

Andrey Kovalev

ABSTRACT

The introductory part of the article is devoted to a brief overview of the typical methods of raising funds for a company's capital. Then, I compared The pros and cons of each approach. Further, the author introduces the company's new fundraising — through the merger with a SPAC (from now on referred to as the merger with SPAC). The article discusses the advantages and disadvantages of this option for a company to enter public capital markets or raise capital in a company compared to the already traditional methods — raising private capital and entering public capital markets through an IPO. As a result of this comparison, the author concludes that the merger with SPAC has the advantages of both classical options for raising capital, without their disadvantages, which makes this option a unique offer on the market. Statistical data confirmed this conclusion. The separate section in the article is devoted to the peculiarities and complexities of the merge with SPAC. The advantages of the merger with SPAC for the leading Russian companies compared with other types of capital raising are separately highlighted, and the contrast between the placement on the MICEX and the merger with SPAC. The article also presents statistics on the public capital market and the impact on the public market of the new opportunity for companies to go public. In the final section of the article, the author discloses the chain of events that brought the merger with a SPAC such a fame and popularity at the current moment in time. The article resulted in an explanation of the attractiveness of institutional investors' investment of funds in companies that have chosen the merger with a SPAC as a potentiality for entering public capital markets.

Keywords: IPO; SPAC; public market; rise capital; new opportunity; structured IPO

JEL Classification: G11, G18, G53

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o you know all the options available for raising funds for a company? In this article, I will outline one you may not have heard of that may be a better option for your company than the traditional methods.

There are limited options for obtaining company capital. They may be obvious to you, but let's go over them. Lending is the first and most common option and possibly simplest for obtaining funds. It requires the least amount of special knowledge to complete.¹

There is also private capital, which has several advantages and disadvantages.²

A final option is using public capital. This option imposes a "quality seal" by the open market on the entire company, from business processes and the existing management system to the assessment of the personalities of the company's management and shareholders.³

Each of these fundraising methods also has several variations. Also, note that only two of the above options are not debt-based financing but rather based on receiving investments toward the company's fixed capital.

Let us take a look at the pros and cons of each of these options and then try to find an alternative that combines the strengths of each.

After comparing the options for obtaining private capital and entering the public market, I would like to determine if there is another option that has the advantages of one and not the disadvantages.

This option is entering the public capital market through a merger with SPAC or Special Purpose Acquisition Company.⁴ SPAC is a business created without commercial operations that raises capital through an IPO. With SPAC, the company goes public through a merger with a company created specifically for this purpose. The created company is listed on the exchange

 $^{^{\}rm 1}$ See Wikipedia "Loan". https://en.wikipedia.org/wiki/Loan.

² See Investopedia "Private Equity". https://www.investopedia.com/terms/p/privateequity.asp.

³ Article from Investopedia "Initial Public Offering (IPO)". htt-ps://www.investopedia.com/terms/i/ipo.asp.

⁴ Article from Investopedia "Special Purpose Acquisition Company (SPAC)". https://www.investopedia.com/terms/s/spac.asp.

Private capital

- ✓ The ability to manage the competitive process between several investors to ensure the highest company valuation
- ✓ Investors bring significant value to the company, allowing management to improve and develop
- ✓ Potentially less dilution of the existing shareholders' ownership
- ✓ Not required to become a public company and create audited financial statements
- ✓ Potentially maximum flexibility in deal structure and ownership
- It is impossible to fulfill the wishes of current shareholders to go out of business quickly. Most likely, the new investor will not be able to attract liquidity fast enough for a new buyout of the current shareholders' share
- Distribution of operational/management control over the company in the new investor's favor
- Dependence on the investor's wants and financial capabilities. The resources of even a group of investors are limited and always inferior to the public capital market
- It is difficult to determine the schedule for the fulfillment of obligations by the involved parties
- Finding the "right" long-term investment partners can be challenging

IPO

- ✓ The largest capital market in the world
- ✓ Opportunity to present the company directly to the entire market and tell its story

vThe ability to place offers among holders of preferred shares

Subject to market risk

Lengthy procedure for entering the public capital market (six months or more)

☐ The valuation of the company by investors participating in the IPO is not known until the completion of applications from investors

Limited ability to get feedback on the business plan before the placement is announced

☐ Inability to disclose the company's objectives and projections

Limited disclosure of information on a company, which often leads to an undervaluation of a company

☐ Inability to control who the shareholders are ☐ The intricacies of the company and its

I he intricacies of the company and its management will be public. The company must provide audited financial reports

and funded by investors at the time of placement. SPAC can use the available funds, both for the buyback of shares of current shareholders, for the additional issue, and for channelling the received investments into business development.⁵

When trying to understand the main idea of SPAC and the main differences from a classic IPO, it helps to think of SPAC as a structured IPO. The sponsor, or organizer of the SPAC placement, is usually a global institution of private investors or internationally recognized entrepreneurs with proven track records of successful investment and asset management.

SPAC merger is the fastest way for a company to go public with a higher valuation than an IPO. It is also important to note that the assessment of the company's value is determined and negotiated by the parties before the merger with SPAC is completed. By the time of negotiations on the deal, SPAC will have already collected

a large sum of capital from investors. Also, if SPAC does not have enough funds to complete a transaction, additional funds can be gained by attracting clients through the Private Investment In Public Equity, or PIPE, mechanism. The amount of PIPE, as a rule, is two to three times the amount of funds initially attracted by the sponsor when placing SPAC.⁶

When comparing the volume of paperwork for a traditional IPO versus a merger with SPAC, the process for a merger with SPAC is simpler since SPAC has previously completed the essential parts of all necessary preparatory work.⁷

It is crucial to understand that the advantages of SPAC, in this case, should be considered based on the fact that a merger with SPAC is taking place and not a public offering of the

⁵ The U.S. Securities and Exchange Commission. Special Purpose Acquisition Companies; Division of Corporation Finance; Securities and Exchange Commission; CF Disclosure Guidance: Topic No. 11; Date: December 22, 2020. https://www.sec.gov/corpfin/disclosure-special-purpose-acquisition-companies.

 $^{^6}$ Carol, Anne. Capital Markets. Winston & Strawn LLP. SPAC 101. https://www.winston.com/images/content/1/3/v2/135061/Winston-Strawn-%20SPAC-Basics-Presentation-2018.pdf.

⁷ See Carol Anne. SEC Should Revisit Its Special Purpose Acquisition Co. Regs, Law 360 (February 14, 2019) in which the undersigned has suggested other areas in which regulations have impeded capital formation by SPACs. https://www.law360.com/articles/1129102/sec-should-revisit-its-special-purpose-acquisition-co-regs.

company, which is regulated by other laws and regulations.

An obvious advantage of SPAC merger over a traditional IPO is that the company can provide investors with predictive financial and operational indicators prohibited in an IPO. SPAC makes it possible to position fast-growing companies with investors to increase the company value and profitability quickly.

When comparing the valuation of a company with the two methods, it can easily be concluded that the average transaction size under SPAC's merger option for entering the public market is higher than the standard classic IPO option.

It is important to note that there is a sponsor in the SPAC deal structure. The sponsor and their team bring a new perspective and value to the company, which further increase its value.

In a merger with SPAC, the company can choose its investors with the sponsor and shareholders attracted through the PIPE mechanism. The already-established investors who were attracted to SPAC during the placement understand who they are and decide on the merger already relying on this information. When entering the public market through SPAC, the company understands and can choose its future shareholding, which is impossible with the classic IPO, where the company cannot influence this process in any way. That combines the process of merging with SPAC with the features of attracting private capital and makes this option for entering the public capital market a unique opportunity.

SPAC merger also has several disadvantages. First, the current shareholder's share is diluted by the sponsor and investors, including warrant-holders and PIPE Investors. Second, the distribution of rights and powers between the current shareholder and new investors is consistent with an IPO. Still, it is necessary to remember the role of the sponsor in this matter. A third disadvantage is the inability to control the composition of shareholders in the share of the company's public offering. Finally, appropriate audited reporting is required for a company to be ready to go public.

The main disadvantage of a merger with SPAC is the cost. Unfortunately, the services of the sponsor and SPAC are not cheap. Com-

pared to the IPO, the SPAC is more expensive. Depending on the company's size, the volume of placement, and other factors, the cost of an IPO is approximately 6 per cent.8 With SPAC, it will be at least 2.5 per cent more. 9 Again, a lot depends on the size of the company, the size of the deal, the ratio between the funds already raised in the SPAC, and their ratio to the number of additional funds raised through the PIPE mechanism if it is used to finance the merger. 10 This drawback must also be considered in conjunction with the significant advantages of the SPAC option, which allows you to get a higher estimate of the company's value, which neutralizes the higher costs. If you check the historical data, then the company's value in the SPAC option exceeds the number of additional costs that are accrued with this option of entering the public capital market.¹¹

So, is this option just as far from ideal, then? Like other capital-raising options, SPAC has several disadvantages. So, should a company choose the SPAC deal as its primary option?

The speed, confidence, and low risk justify the specifics of entering public capital markets through a merger with SPAC.

The SPAC team can bring new competencies and added value to the company, which increases the value of the share of current shareholders (i.e., the SPAC investors and sponsor will help achieve corporate strategy goals and increase the company's market capitalization).

Thanks to the sponsor's legal structure and reputation, they have a strong relationship with SPAC investors but will ensure the attraction of additional investors through the PIPE mechanism if necessary. With a clear goal of generating long-term returns, high-quality

 $^{^{\}rm 8}$ PwC Publications. Considering an IPO? First understand the costs. https://www.pwc.com/us/en/services/deals/library/cost-of-an-ipo.html.

⁹ Matt Levine. SPACs Aren't Cheaper Than IPOs Yet. July 27, 2020. https://www.bloomberg.com/opinion/articles/2020-07-27/spacs-aren-t-cheaper-than-ipos-yet.

¹⁰ Jay R. Ritter. University of Florida Warrington College of Business. IPO Data. https://site.warrington.ufl.edu/ritter/ipodata.

¹¹ Andrew R. Brownstein, Andrew J. Nussbaum, Igor Kirman, Matthew M. Guest, David K. Lam, DongJu Song, Raaj S. Narayan, Alon B. Harish. Wachtell, Lipton, Rosen & Katz. The Resurgence of SPACs: Observations and Considerations. August 20, 2020. https://www.wlrk.com/webdocs/wlrknew/ClientMemos/WLRK/WLRK.27066.20.pdf.

SPAC investors will increase the company's valuation and ensure that new investors are attracted in the next stages.

A company's ability to access public capital markets is uncertain. There is a risk of IPO failure, for example, due to insufficient demand from potential investors. If an IPO is disrupted or cancelled, as a rule, after two years, the company can try again.¹²

In the SPAC method, this risk is absent since only the sponsor, investors of the SPAC, and the company will determine the key indicators, the timing, and when the participants in this process want to disclose information about the transaction. The law provides specific time constraints, but they are much broader and give more freedom in the SPAC option.

Comparing the pros and cons, we can conclude that the SPAC deal is a preferable option for a company wishing to raise funds in the public capital market.

Based on the information above, it might seem like the SPAC deal is very simple. Alas, this is not the case. A merger with SPAC is not so simple, and it is necessary to approach the choice of partners carefully. They should be able to organize cooperation with international institutional investors at the appropriate level, which achieves the goal of entering the public capital market through the shortest possible route.

For companies from emerging markets, the option to enter public markets through SPAC merger provides several advantages over IPOs on local exchanges:

- Listing on a sizeable liquid exchange in the United States (usually NASDAQ)
- Access to the world's most comprehensive pool of investors (hedge funds, American family offices, and more) that do not participate in local IPOs
- Given the limited allocation to emerging IPO markets by investors, companies may face insufficient demand during book building and, as a result, unsuccessful placement in price and/or volume
- The presence of an outstanding sponsor (for example, a leading fund manager of

Table 1

Dynamics of SPAC IPOs

Year	Dollar value, billion	Number of SPAC IPOs		
2015	3.61	20		
2016	3.22	13		
2017	9.00	34		
2018	9.69	46		
2019	12.01	59		
2020	75.39	247		

Source: The author.

emerging markets) allows the company to determine the factors of the company's investment attractiveness in the eyes of the investor community in advance. It also allows the company to achieve a higher valuation and/or demand from non-core investors

- Access to a broader pool of capital will increase the total transaction volume compared to a classic IPO, especially an IPO on the local capital market
- The structure of entering the public market through the takeover of SPAC reduces regulatory costs and provides more opportunities for disclosing information about the company to investors during the transaction
- The company's merger with SPAC, sponsored by leading international institutional investors, provides additional safeguards against legal and political risks

Since 2015, more and more companies have chosen to enter the public capital market through the merger with SPAC. According to the research company Deal Point Data, in 2020, there were 247 IPOs through the merger with SPAC, with a total valuation of \$ 75 billion, accounting for 53 per cent of the total number of proposals and 48 per cent of the total IPO market by value.¹³

The same results, graphically.

¹² Alex Rampell and Scott Kupor. Andreessen Horowitz. In Defense of the IPO, and How to Improve It. August 28, 2020. https://a16z.com/2020/08/28/in-defense-of-the-ipo.

¹³ Christopher M. Barlow, C. Michael Chitwood, Howard L. Ellin, P. Michelle Gasaway, Gregg A. Noel, Franklin P. Gregg. The Year of the SPAC. Skadden's 2021 Insights. January 26, 2021. https://www.skadden.com/insights/publications/2021/01/2021-insights/corporate/the-year-of-the-spac.

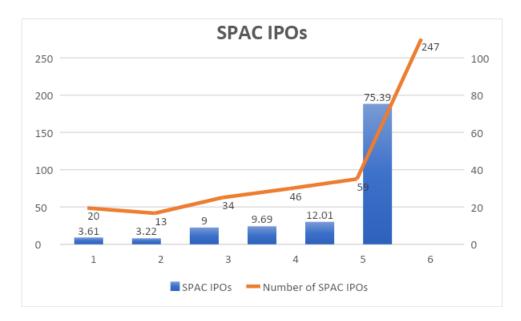


Fig. 1. Dynamics of SPAC IPOs

Table 2
The scale of transactions with SPAC

#	Summary of SPACs	#	Proceeds \$M
1	SPACs seeking acquisition	320	99,668
2	SPAC announced acquisition	79	24,63
3	SPACs completed acquisition	280	54,742
4	Total	679	179,04

Source: https://www.spacanalytics.com/.

The largest deals completed or announced on the SPAC market of all time are the following mergers:

- 1. United Wholesale Mortgage (https://www.uwm.com/) \$ 16 billion.
- 2. Owl Rock (https://owlrock.com/) and Dyal (https://www.dyalcapital.com/) \$ 12.7 billion.
- 3. Multiplan (https://www.multiplan.com) \$ 11.1 billion.
- 4. Paysafe (https://www.paysafe.com/) \$ 9 billion.
 - 5. Sofi (https://www.sofi.com/) \$ 8.7 billion.
- 6. CCC Information Services (https://cccis.com/) \$ 8 billion.
- 7. Alight Solutions (https://alight.com/) \$ 7.3 billion.
- 8. Golden Nugget (https://www.goldennugget.com/) and Landry's (https://www.landrysinc.com/) \$ 6.7 billion.

- 9. Arrival (https://arrival.com/) \$ 5.4 billion.
- 10. Vertiv (https://www.vertiv.com/) \$ 5.3 billion.

For a better understanding of the scale of transactions with SPAC as of February 10, 2021,¹⁴ take a look at the following statistics in Table 2.

The SPAC merger was not the most popular option for entering the public capital market for a long time. Over the past decade, both companies and investors have preferred the classic IPO option. It was only in the last two years that the SPAC deal took off and became trendy. For a better understanding of the trend before the version of the classic IPO, see Table 3.

For clarity, let's present the dynamics of the number of classic IPOs in total and IPOs by the SPAC mechanism over the past ten years.

¹⁴ Data from SPAC Analytics. https://www.spacanalytics.com/.

Table 3
Comparative dynamics of SPACs and IPOs

Year	SPAC IPOs	Total IPOs	%	SPAC Proceeds \$M	Total US IPO Proceeds \$M	%
2021	133	156	85%	39,069	55,825	70%
2020	248	450	55%	83,343	179,346	46%
2019	59	213	28%	13,600	72,200	19%
2018	46	225	20%	10,750	63,890	17%
2017	34	189	18%	10,048	50,268	20%
2016	13	111	12%	3,499	25,779	14%
2015	20	173	12%	3,902	39,232	10%
2014	12	258	5%	1,750	93,040	2%
2013	10	220	5%	1,447	70,777	2%
2012	9	147	6%	490	50,131	1%
2011	16	144	11%	1,110	43,240	3%
2010	7	166	4%	503	50,583	1%
2009	1	70	1%	36	21,676	0%
2008	17	47	36%	3,842	30,092	13%
2007	66	299	22%	12,094	87,204	14%
2006	37	214	17%	3,384	55,754	6%
2005	28	252	11%	2,113	61,893	3%
2004	12	268	4%	485	72,865	1%
2003	1	127	1%	24	49,954	0%
Total	769	3,729		191,489	1,173,749	

Source: https://www.spacanalytics.com/

At first, there was a steady growth in the number of SPAC options for entering the public capital markets, but it has rocketed in the last two years.¹⁵

What caused this? What has happened in the last few years that made the SPAC merger so attractive? Let's take a look at the main reasons for the rapid development of SPAC in recent years.

The main event was in 2008 when SPAC investors were given the right to vote on the company's merger with SPAC and, at the same time, withdraw their funds. This change in a

regulation made the position of investors more protected than before.

Over the past seven years, there has been a significant decrease in the sponsor's services and SPAC fees. Although they are for a company wishing to enter the public capital market, they are higher than the cost associated with a classic IPO. Still, at the moment, this difference is levelled by the other factors described above.

The next major step was using the PIPE mechanism to collect additional funds in the case of a shortage of funds initially gathered by the sponsor.

In conclusion, investors should not underestimate a merger with SPAC as an excellent option for entering the public market. Just two years ago, some viewed a merger with SPAC as

¹⁵ Alexander Osipovich. The Wall Street Journal. Blank-Check Boom Gets Boost from Coronavirus. July 13, 2020. https://www.wsj.com/articles/blank-check-boom-gets-boost-from-coronavirus-11594632601.

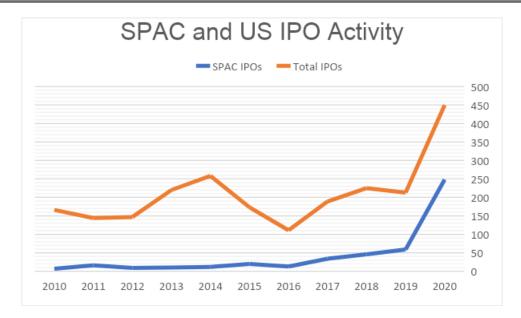


Fig. 2. Comparative dynamics of SPACs and IPOs

Source: https://www.spacanalytics.com/

an option for losers who could not qualify for a classic IPO, but now investors understand that this is entirely wrong. Several large, public deals have changed this view, such as Richard Branson's Virgin Galactic ¹⁶ or Bill Ackman's SPAC, the largest to date at \$ 4 billion. ¹⁷ After world-famous entrepreneurs and investors started using SPAC mergers, the attitude towards them changed. The SPAC merger has become the most popular option for entering the public capital market.

Put yourself in the shoes of SPAC investor. Should you invest in SPAC? Consider how investing in SPAC is better than investing in other asset classes.

The answers should be determined on a caseby-case basis and will vary for each individual company. The main idea is that for the SPAC investor, considering the current rates of the world central banks and bond yields is possibly the most profitable asset for investing in comparison with other instruments, proffering a fixed income.

The terms of the "typical" merger with SPAC and a detailed analysis of the company's direct merger with SPAC is outside the scope of this article and is its own topic.

In conclusion, I would like to summarize several results.

First, we got acquainted with another trendy option for raising funds for a company's capital.

Second, I explained the advantages and disadvantages of entering the public capital markets through a merger with SPAC.

Finally, with the help of investors, the company's shareholders should determine which option the company should use to raise capital and enter the public market.

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Andrey Kovalev is a strategic manager, expert with a significant project portfolio. He worked in both small and large companies of various forms of ownership. He created business plans and development strategies for several dozen projects and successfully implemented them. Internationally, he is versed in operations management, financial and product management. He was repeatedly appointed as an anti-crisis manager in various sectors of the economy. Extensive experience in corporate finance, development and implementation of anti-crisis measures, building organizational and financial processes in commercial organizations, building ownership structures and establishing shareholder control over projects and companies. Experience and skills of working as a CEO and COO, CFO and project manager. Deeply, at the level of the implementation project manager, he understands all issues related to IT, which, as a rule, is not characteristic of top managers (C-level). He has several unique competencies, such as troubleshooting, knowledge of advanced ways of working in international capital markets, such as entering international capital markets through the merger with SPAC, etc.

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IPO, частный капитал? Heт! SPAC!

Андрей Ковалев

АННОТАЦИЯ

Вступительная часть статьи посвящена краткому обзору типичных методов привлечения денежных средств в капитал компании. Проводится сравнение плюсов и минусов каждого подхода. Автор знакомит с новым вариантом привлечения денежных средств для компании — посредством слияния со SPAC. В статье детально рассматриваются преимущества и недостатки данного варианта выхода компании на публичные рынки капитала или привлечения капитала в компанию в сравнении с уже традиционными методами — привлечением частного капитала и выходом на публичные рынки капитала посредством IPO. Автор делает вывод, что слияние со SPAC обладает преимуществами классических вариантов привлечения капитала без их минусов, что делает данный вариант уникальным предложением на рынке, что и подтверждается статистическими данными. Отдельный раздел в статье посвящен особенностям и сложностям механизма слияния со SPAC, выделяются преимущества этого слияния для ведущих компаний России в сравнении с другими видами привлечения капитала на фоне контраста между размещением на ММВБ и слиянием со SPAC. Приведена статистика по публичному рынку капитала и тому влиянию, которое оказал на него механизм выхода на публичные рынки капитала посредством слияния компании со SPAC. В заключение автор раскрывает и комментирует всю цепочку событий, которая принесла варианту слияния со SPAC такую известность и популярность.

Ключевые слова: IPO; SPAC; публичный рынок; увеличить капитал; новая возможность; структурированное IPO

ОБ АВТОРЕ

Андрей Ковалев — бакалавр экономики, магистр менеджмента и финансов, бакалавр права. Имеет более 30 сертификатов и дипломов, полученных по окончании курсов повышения квалификации в ведущих российских и международных образовательных центрах. Стратегический управляющий, эксперт, имеющий значительное проектное портфолио. Работал как в малых, так и в крупных компаниях различных форм собственности. Создавал бизнес-планы и стратегии развития для нескольких десятков проектов и успешно их реализовывал.

Why SPACs Are Booming, and Is there the SPAC Bubble?

David Erickson, Itamar Drechsler, Nikolai Roussanov, Joao F. Gomes

ABSTRACT

As of May 10, 2021, according to SPAC Alpha, there were 315 special purpose acquisition company (SPAC) IPOs completed YTD — more than 100 per cent higher than the number of SPAC IPOs in the previous four years combined. David Erickson, Itamar Drechsler and Nikolai Roussanov explore how the SPAC market exploded in 2020 and what may happen in the future.

Keywords: IPO; SPAC; mergers JEL Classification: G11, G18, G53

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wenty years ago, there was tremendous speculation in the equity market when hundreds of very early-stage companies (often referred to as "dot-coms") were doing IPOs, fueled largely by enthusiasm from retail/day traders. I remember this period vividly because back then, I was one of the bankers that worked on many of those tech/internet IPOs. During this period, I would often get into a taxi in San Francisco (yes, people used taxis back then) to race from one meeting to the next with these dot-coms; and when the driver found out I was a banker, he would often describe his best dot-com trades and ideas. In late 2000, this "bubble" burst, and today this period is often referred to as the tech (or dot-com) bubble. Twenty years later, similar characteristics seem to now exist in the SPAC market. To give a perspective on how big the SPAC market has become, note that the number of traditional company IPOs¹ in the US averaged just over 150 per year. It compares to 315 IPOs — just in the SPAC market — that had been completed by May 10, 2021, raised by December 2020 to \$ 77.6 billion, with another 56 on file vs a total of 59 SPAC IPOs completed in 2019. See Figure.

In March of last year, in our *Strategic Equity Finance* class, David Erickson got a question from a student about SPACs. He asked, "Will we talk about SPACs in this course?" At that point, while there had been a couple of high-profile SPAC mergers completed in the recent months, including Virgin Galactic and DraftKings, the equity market had started to tumble as the coronavirus pandemic was taking hold. I responded somewhat dismissively, "We'll talk about it later in the term, but SPACs are not a very big part of the equity market."

Fast forward to now, and David has received numerous inquiries from private equity firms and hedge funds interested in my view as to whether they should "sponsor" a SPAC. His apologies to that student back in March (as maybe he was prescient about what was to follow later in the year).

While the SPAC market has been around for about twenty years, it really took off in 2020, with all of these SPAC IPOs as well as SPAC mergers announced exceeding over \$ 125 billion in volume, according to *Axios*. So, what has caused this emergence? Before we talk about the emergence of SPACs this year, let's clarify what a SPAC is (and isn't).

What Is a SPAC?

A SPAC (short for special purpose acquisition company and often referred to as a "blank check company") raises equity in a traditional IPO process. This shell company is formed to search for and merge with a private company (or companies); the company usually has up to two years to complete a merger, often referred to as an IBC — Initial Business Combination. A "sponsor," often consisting of

¹ An initial public offering, IPO, or stock market launch is the first sale of stock by a private company to the public. IPOs are often issued by smaller companies in search of the capital necessary to expand their operation but are also often performed by larger, privately owned companies looking to become publicly traded on stock exchanges. China has recently emerged as a leading IPO market, but the United States remains the leading country worldwide, by number of company IPOs. The largest IPO in the U.S. so far was that of Alibaba Group Holding in 2014, in which 21.77 billion U.S. dollars was raised.

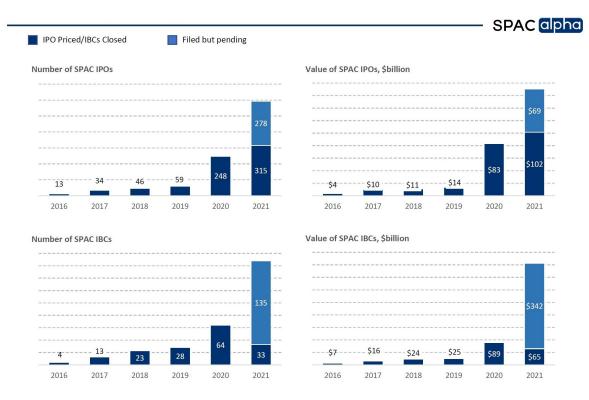


Fig. SPAC IPO & IBC activity

Source: SPAC Research. Note: IBC is Initial Business Combination.

former corporate executives (and in more recent cases, private equity firms), acquires a stake in the SPAC. Historically, the sponsor's stake is around 20% of the SPAC. The SPAC sponsor, including the SPACs management team, is responsible for running the operations of the SPAC and finding a private company to combine. The 80% balance of the SPAC ownership is what is sold in the IPO to public investors. These proceeds raised are held in escrow until the completion of the business combination or the expiration of the SPAC.

One of the nuances with the SPAC structure is that the sponsor typically has two years (from its IPO) to complete a combination, or else the investors can redeem their shares. If this happens, the sponsor gives back the money held in escrow and will lose on the cost of the IPO and expenses to date. As a result, it could be argued that the SPAC sponsor is highly motivated to complete an acquisition, even potentially if the quality of the company they are acquiring is of lesser quality. It will probably be the case in more than a few acquisitions that have been announced (as well as those to be announced).

Why Have SPACs Emerged This Year?

A combination of factors has caused this SPAC activity to explode in 2020, including:

Financing for many private companies became more difficult in the latter half of 2019.

Part of this could be attributed to the struggles of "unicorns" — Lyft, Uber, and Slack — that went public earlier in 2019 but did not trade well in the latter half. Additionally, the high-profile debacle of WeWork, filing to IPO in August 2019 and then having to be restructured by October at a fraction of its previous valuation, created more scrutiny on companies looking to IPO. Thus, it caused many potential IPO candidates to pause their plans. At the same time, the venture financing market became more difficult when the biggest source of venture financing in the last few years, Softbank, got very quiet as it was "licking its wounds" as the largest shareholder of WeWork, Uber and Slack. With the IPO becoming more difficult and with less liquidity in the private venture market, the market became more price-sensitive and selective for many private companies. As a result, some of these companies started looking for alternative sources of financing.

Retail investors embraced more speculative, volatile stocks. Early this year, two of the best-performing stocks daily were Tesla and Virgin Galactic. While the "cult" following of Tesla's stock has been well documented in recent years, Virgin Galactic — which in recent months had started trading after merging with venture capitalist Chamath

Palihapitiya's first SPAC — developed its own cult following. Even though it was already aggressively valued, Virgin Galactic's stock (SPCE) went from \$ 11.70 on January 02 to \$ 38.79 on February 20 more than 330% in less than two months. Then, DraftKings started trading in late April, following the completion of its merger with the Diamond Eagle Acquisition SPAC, and five weeks later had traded up more than 250 per cent. And as the "Robinhood cohort" (as these aggressive retail traders are called today vs e-/day traders back in the 1999/2000 tech bubble) continued to make money on these more speculative names, they got even more aggressive. Instead of waiting for a merger to be completed, they also started speculating on the IBC announcements. One example of this speculation is TPG Pace Beneficial Finance SPAC (Ticker: TPGY), which, after announcing its acquisition of EVBox, opened up 245 per cent the next trading day. While EVBox, the leading charging platform for EV cars in Europe, is the latest company in the "hot" EV/AV space that announced its intention to be acquired by a SPAC, 245 per cent is still a huge "pop," and that was probably absorbed by many in the Robinhood cohort of traders. This retail interest is not limited to SPACs; they have also been actively speculating in the IPO market and even in Bitcoin's rise in the last month. As SEC Chairman Jay Clayton noted in an interview on CNBC about the speculation happening in the market, "There is a new paradigm. There are more retail investors participating in the market than ever before."

With interest increasing, supply follows. The need for capital from some of these private companies combined with enthusiasm for SPACs from investors has generated more interest from SPAC "sponsors" — and as a result, more SPAC IPOs have come.

Additionally, as data from *SPAC Alpha* shows, there had been 104 SPAC mergers announced as of December 14, 2020, 48 of which have been completed. This compares to 28 completed in 2019. Currently, 221 SPACs have completed their IPOs (some of which were done in 2019) and are looking for an acquisition target.

Like it is with all markets after they have had a significant run, the SPAC market will likely see a correction soon. With all of this supply, SPAC sponsors have gotten even more aggressive and have announced mergers with an increasing number of earlier-stage companies.

Where Does the SPAC Market Go from Here? While there is still a lot of enthusiasm for SPACs as I write this, with new SPAC IPOs being filed and mergers/IBCs announced daily, the SPAC

and mergers/IBCs announced daily, the SPAC market, like with all markets after they've had a significant run, will likely see a correction soon. What could cause this?

As we saw back in 2000 with the tech bubble, the fraying started as more and more dot-coms went public, and the stocks of those companies that had just done their IPOs started to trade poorly. As a result, investors began to lose money, and eventually, they lost their enthusiasm. It eventually caused the dot-com IPO market to seize up, as more struggled to complete their IPOs. To parallel what could happen in the SPAC market, we will likely first start to see some of the mergers completed in recent months struggle from a trading perspective. I would assume that it would start with some of these earlier stage/ pre-revenue companies. Why these companies? Because it is likely that with all of the SPAC IPOs out there looking for targets, some of these sponsors probably stretched to get deals done with some earlier-stage companies that may not quite be ready to be public. At the same time, with all of the SPAC IPOs completed, there will likely be a correction, as many of these companies looking for acquisitions will likely fail to complete a merger/IBC.

That is having been said, what 2020 has taught us is that SPACs are a viable way for some private companies to go public in the future. Just like we saw from the tech bubble, some great companies emerged from this period, and the quality of technology and internet IPOs that have come since has improved dramatically. I would expect the same type of positive evolution to occur in the SPAC market going forward.

According to Wharton finance professor Joao Gomes SPACs have been one of the "most spectacular" developments in financial markets in recent years. He moderated a recent Wharton Executive Education virtual event titled "Understanding SPACs," where Wharton finance professors Nikolai Roussanov and Itamar Drechsler explained how SPACs work and their pros and cons for investors. "These so-called 'blank-check companies' proved a hit with investors and many young private companies wishing to go public as well as several top celebrities," Gomes added.

How Does a SPAC Work?

SPACs are entities with no commercial operations of their own and are created by investors — called sponsors — to buy operating companies they consider promising. In recent years, SPACs have been active in the sectors of electric vehicles, green technology, consumer-oriented technology, communications, and retail.

A SPAC is a publicly listed shell company that is created to merge with a private operating company. The merger creates a single entity that will trade publicly and thus give a public listing for the private operating company. When SPACs raise their initial capital, they are not required to identify the operating companies they plan to buy; the SPAC's selling proposition is based on the reputation of its sponsors.

From the time a SPAC lists and raises money through an IPO, it has 18 to 24 months to find a private operating company to merge with. If a SPAC cannot find an acquisition target in the given time, it liquidates and returns the IPO proceeds to investors, who could be private equity funds or the general public. SPACs usually find those target companies.

Investors in the IPO of a SPAC typically buy what are called units for \$ 10 each. The unit consists of a common share, which is regular stock, and a derivative called a warrant. Warrants are call options, and they allow investors to buy additional shares at specified "exercise" prices. After the merger with the shell company, both the shares and the warrants are listed and traded publicly.

If some SPAC investors change their minds and do not want to participate in the merger with the shell company, they could redeem their shares and get back the \$ 10 they paid for each. However, they can retain the warrants.

To increase the amount of cash available for the operating company that has been taken public, it is common for SPAC sponsors to bring in institutional investors to buy additional shares. These are called PIPEs, or "private investment in public equity," which typically are large mutual funds, pension funds, and sovereign wealth funds.

SPACs vs IPOs: Which Is a Better Route?

For private companies, a merger with a SPAC is seen as a better route to go public than undertaking their own IPOs. Roussanov explained the main advantages and disadvantages of the SPAC route to go public. He said: "The public equity markets democratize access to capital for entrepreneurs and

also democratize access to investment opportunities for investors.". "Over the last couple of decades, we have seen a dramatic decline in the number of publicly-listed and publicly-traded companies in the US from the peak of about 8,000 in the late 1990s that coincided with the Nasdaq tech boom to about half of that, if not less, in the early to mid-2000s and 2000 teens."

The growth of private equity perhaps contributed to that the decline in the number of publicly listed companies. Roussanov added: "There is also a sense that going public has become costlier for firms, both in terms of the monetary cost that the company founders bear and in terms of the time it takes to go public." Companies go public at later stages of their life, perhaps because they must prove their feasibility in the marketplace, he noted.

At the same time, there seems to be pent-up demand for capital from "small and young firms with maybe great new innovative ideas," Roussanov said. They probably find it harder to raise money through additional stages of, say, venture capital, but they are not yet ready for the IPO process, he added. "For a young, capital-hungry, but pre-revenue firm, the IPO route is not usually available."

According to Roussanov the SPAC route is the only viable way for those firms to both raise capital and acquire a public listing in a fairly short period. The speed of completion of a SPAC deal is dramatically shorter than the usual IPO process that involves roadshows and a book-building process, he added.

According to Drechsler the long lead time for an IPO may mean that a firm may miss market windows where potential investors are flush with cash and looking for opportunities. "Instead, if you find a SPAC that will merge with you, that can happen in a couple of months."

Roussanov also added that the SPAC model has become popular because "in some ways, it is fulfilling a need" for both firms going public and investors". "There has been a pent-up demand from investors, in particular retail investors who have been excluded from participation in the early stage of the life cycle of many of these innovative firms that turned out to be huge successes." He pointed out that much of the promise in a startup is realized in its early stages.

For companies early in their life cycle, another disadvantage with IPOs is that they are not legally allowed to make projections or forward-looking statements on their performance. Firms filing for IPOs are only allowed to report historical financial

performance, but with startups, "it's all a bet on the future," Drechsler said.

By contrast, SPACs as mergers have "safe harbour" or protection from legal liability for forward-looking statements, Drechsler pointed out. Not surprisingly, SPACs are called blank-check companies because of those lower disclosure requirements.

As Drechsler noted, the SPAC route has enabled startups like Newark, Calif.-based Lucid Motors to raise capital, although the electric vehicle maker is "not even selling any cars at this point." Lucid, which is billed as a rival to Tesla, raised \$ 4.4 billion in February 2021 with a \$ 24 billion enterprise valuation and plans to begin production in the second half of this year.

Regulators Paying Attention

As with all booms, the popularity of SPACs has attracted regulatory scrutiny. The Securities and Exchange Commission (SEC) "is worried that there's too much frothiness in SPACs," Drechsler noted. He pointed to the SEC recently opening to interpretation whether SPACs are IPOs in disguise and if they should be granted safe harbour in making financial projections.

In a recent statement, the protection from legal liability SPACs have in making financial projections raises "significant investor protection questions," wrote John Coates, acting director in the SEC's division of corporate finance. (Such SEC statements represent only the author's views.) That [regulatory attention] has potentially introduced uncertainty into the SPAC wave.

"The SEC is watching the situation and reassessing how heavily it should regulate SPACs going forward," said Roussanov. "So far, they've employed a light touch, but now they've said that the safe harbour exemption does not mean that you cannot be sued for saying something that turns out to be patently wrong."

According to Roussanov the SEC is likely to push for "market self-discipline rather than heavy-handed regulation, unless some major blow-ups occur where investors suffer dramatic losses and retail investors, in particular, suffer large losses." Drechsler added: "Maybe we should deliberately change some laws rather than just waiting for something to happen and interpreting it after the fact." He pointed out that during the dot-com boom of the late 1990s, the IPO frame-

work did not prevent investors from investing in dud companies.

Roussanov agreed that the IPO process is "probably ripe for reform." However, with SPACs, the role of sponsors makes a difference in that their payoff depends on the firm doing well. "Typically, SPAC sponsors don't just cash out and leave; they stick around for some time," he said. "The reputation of the SPAC sponsor is on the line when they are acquiring a company. The investors who buy into a SPAC are essentially buying into the skill and the reputation of the SPAC sponsor."

Drechsler also suspected "a design flaw" in how SPAC units are structured. Each SPAC unit that an investor buys for \$ 10 comprises a share and a warrant. The investor can redeem the share and recoup the \$ 10 investment but gets to retain the warrant (typically a fraction like one-half or one-third of a warrant) that they can convert into shares. "It's like you buy a pair of sneakers, you try them, you don't like them, you bring them back, but you keep the shoelaces, and you get your money back."

Drechsler continued: "This is essentially an arbitrage. If every unit holder redeemed, there would be no merger, there would be no money left in there, and the warrants wouldn't be worth anything. The only way the strategy does any better than breakeven is if some people stay invested and the people who redeem essentially piggyback on them."

Itamar Drechsler says, "It's like you buy a pair of sneakers, you try them, you don't like them, you bring them back, but you keep the shoelaces, and you get your money back."

When warrants are converted into shares, they allow the SPAC sponsor to raise more capital; they are also a way to "potentially compensate the SPAC sponsor," Drechsler said. Gomes pointed out that much attention is focused on statements by SEC officials on the accounting treatment for warrants in recent weeks.

Mixed Performance

SPACs have had mixed performance outcomes. Drechsler pointed to a recent University of Florida study which showed that while investors in SPAC IPOs earned 9.2 per cent a year, returns for investors in merged companies have ranged from losses of up to 15 per cent and earnings of up to 44 per cent on warrants.

Roussanov described the SPAC sponsor's compensation of 20 per cent of the capital of the publicly listed entity as "a very high-powered incentive." Of

course, if the venture fails, the sponsor loses everything, he noted.

Many SPACs have been set up by venture capitalists or private equity firms that are intimately familiar with select industries, Roussanov noted. For instance, the CEO of Lucid Motors, Peter Rawlinson, was formerly the vice president of vehicle engineering at Tesla and chief engineer of its Model S car.

Tempered Days Ahead

Even as the SEC weighs more regulation, the SPAC boom will give way to some moderation over time, according to Roussanov. "We could see some of the froth disappearing from this market for the same

reasons that we might see the valuations decline across the broad cross-section of markets," he said. He noted that the prevailing setting has "a unique confluence" of low-interest rates, dramatically reduced uncertainty since the pandemic began in March 2020, and "lots of investors with liquidity, cash sitting in their accounts, not knowing what to put them in."

That setting may not last for long, as inflation begins to pick up and the Federal Reserve may increase interest rates, Roussanov noted. "Eventually, that could drive down valuations across the board. It could make this whole SPAC sector shrink back to its pre-2019 size."

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Professor Gomes's research was published in the top academic journals in both Economics and Finance and covers: (i) the role of financial frictions on corporate investment, (ii) the impact of monetary policy on corporate investment and financing decisions of firms; (iii) the impact of corporate leverage and investment decisions on asset prices and the cost of capital; and (iv) the fundamental sources of performance variation across asset classes. The work won multiple awards, including the Smith Breeden Prize for Best Asset Pricing Paper published in the Journal of Finance; the Marshall Blume First Prize in Financial Research, the Award for Best Investments Paper presented at the Western Finance Association meetings, the Jacobs Levy Outstanding Paper Prize, and the Crowell Memorial Prize.

Professor Gomes first joined the Wharton School in 1997. He was a Visiting Professor of Finance at the London Business School between 2009 and 2011. In addition, Professor Gomes visited several international universities and research centres, including Goethe University in Germany, the University of British Columbia in Canada, the New University of Lisbon in Portugal, and the US Federal Reserve System. Earlier in his career, he served as an economic advisor in the Ministry of Industry of Portugal.

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David Erickson is currently a Senior Fellow and Lecturer in the Finance Department and Co-Director of the Stevens Center for Innovation in Finance. David is also a Lecturer in Law at Penn Law/University of Pennsylvania Law School. In addition to his responsibilities at Wharton, David acts as a consultant to both private and public companies on capital markets, corporate governance, and exploring strategic alternatives. He was also an operating partner at Bessemer Venture Partners, one of the leading global venture capital firms and an advisory board member of Accompany, a relationship intelligence technology company (acquired by Cisco Systems, May 2018).

After over 25 years on Wall Street, David retired in 2013. Most recently, he was co-head of global equity capital markets at Barclays. He was responsible for all of their corporate equity capital raising globally, including all IPOs, follow-ons, private placements and convertibles, as well as equity derivatives. As part of his responsibilities, David was a member of the firm's investment banking operating committee and equity capital commitment committee. Before Barclays acquired Lehman Brothers' US broker-dealer in 2008, David was head of global equity capital markets at Lehman.

In 2004, he was named Lehman's head of US equity capital markets. Lehman was awarded International Financing Review's 2005 US Equity House of the Year and US Equity-Linked House of the Year for its equity capital markets success. Prior to 2004, David also had equity capital markets sector responsibilities for Technology, Internet, Media, Consumer & Retail, and Industrials. Early in his investment banking career, David also ran Bankers Trust International's London-based investment management business. Before becoming an investment banker, David worked as a vice president at a Boston-based strategic consulting firm that focused on the investment banking industry. Since retiring from Wall Street, David has been a guest lecturer on capital markets, corporate governance, and entrepreneurial finance at the business schools of Stanford and Kellogg and Northwestern Law School. Previously, David served on the board of trustees of My Money Workshop; a non-profit organization focused on improving financial literacy; the leadership council of AmeriCares, global emergency response and health non-profit organization; and the board of trustees of CancerCare, a leading national non-profit organization that provides assistance to those impacted by cancer. David has a BBA from Iowa State University and an MBA from Boston University.

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Itamar Drechsler is an associate professor of Finance at the Wharton School and a research associate of the National Bureau of Economic Research. He works in the areas of asset pricing, financial intermediation, and monetary policy. He is currently an associate editor of the Journal of Finance and the Journal of Political Economy. He graduated with a PhD in finance from the Wharton School and has an MA in mathematics and bachelor's degrees in finance, mathematics, and computer science from the University of Pennsylvania. Before rejoining Wharton, he worked for nine years in the finance department at NYU's Stern School of Business. Co-Academic Director of Certified Investment Management Analyst® (CIMA®) Certification (EXECUTIVE EDUCATION PROGRAMS TAUGHT). The CIMA® certification is the only credential designed specifically for the financial professional who wants to attain a level of competency as an advanced investment consultant. In partnership with the Investments & Wealth Institute®, Wharton offers an intensive educational component of the program to prepare participants for the Certification Examination.

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Roussanov received an undergraduate degree in mathematics from Harvard College in 2001 and a PhD in finance from the University of Chicago in 2008.

Co-Academic Director of Certified Investment Management Analyst® (CIMA®) Certification (Executive Education Programs Taught). The CIMA® certification is the only credential designed specifically for the financial professional who wants to attain a level of competency as an advanced investment consultant. In partnership with the Investments

& Wealth Institute®, Wharton offers an intensive educational component of the program to prepare participants for the Certification Examination.

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Also, active in programme Investment Strategies and Portfolio Management — Develop investment portfolios that generate the highest return for your level of investment risk. This program provides a solid foundation for building optimal portfolios and effective tools for making better investments.

Courtesy of the Wharton School

Почему SPAC процветает и существует ли пузырь SPAC?

Дэвид Эриксон, Итамар Дрекслер, Николай Русанов, Жоао Ф. Гомеш

РИЗИВНИЕ

По состоянию на 10 мая 2021 г., по данным SPAC Alpha, с начала года было проведено IPO (Initial Public Offering — Предварительная публичная оферта по подписке на акции проектируемой компании) 315 компаний в форме приобретения специального назначения (SPAC). Это означает рост более чем на 100% от количества IPO SPAC за предыдущие четыре года. Авторы исследуют «взрыв» рынка SPAC в 2020 г. и анализируют различные гипотезы и прогнозы на ближайшие годы. Особое внимание авторы уделяют оценке вероятности того, что IPO SPAC могут стать очередным финансовым пузырем.

Ключевые слова: IPO; SPAC; слияния

ОБ АВТОРАХ

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Николай Русанов — получил степень бакалавра математики в Гарвардском колледже в 2001 г. и докторскую степень по финансам в Чикагском университете в 2008 г. Профессор финансов, академический консультант, имеет МВА по специальности «количественные финансы». Является академическим директором программы «Wharton on the Markets». Преподает в онлайн-программе Wharton Executive Education «Инвестиционные стратегии и управление портфелем». Совместно с Итамаром Дрекслером является академическим директором Certified Investment Management Analyst® (CIMA®) Certification.

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World Finance: A Textbook Presentation and Overview

Mikhail Zharikov

ABSTRACT

Financial globalisation is a general trend of contemporary world economic development that multinational corporations largely drive. Many of them come from English-speaking countries. Many of them are of the U.S. origin, which is why globalisation is often misunderstood and misinterpreted as Americanisation. English is the leading language of globalisation. Even European leaders of supranational level have to speak, communicate and pass E.U. legislation in English. That is why teaching and studying world finance in English is given a high priority in many countries. Russia is no exception to the rule and the Financial University under the Government of the Russian Federation (the University of Finance). This book attempts to outlay the theoretical and practical foundation for the world finance. It contains basic world finance terminology. The textbook can be recommended for teaching world finance and related subjects.

Keywords: world finance; discount rate; financial globalisation

JEL Classification: F37 © Mikhail Zharikov, 2021

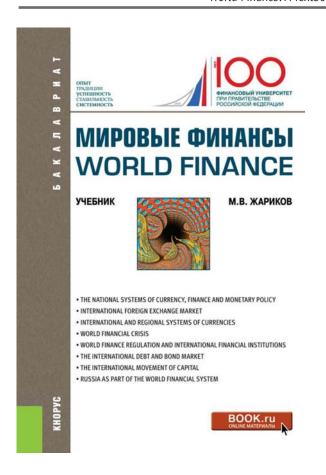
1 Introduction

2020 was both good and bad. It was bad because of isolation, disease, social distancing and death. It was good for writing and publishing books, though. 2020 saw a record number of publications in science and technology in recent decades. There were also several textbooks published. One of the professional textbooks that went in the press under the umbrella of the Financial University under the Government of the Russian Federation is World Finance. The textbook's author is Dr Mikhail V. Zharikov, Professor at the University's World Finance Department. The textbook (pictured) appeared in KNORUS Publishing House (World finance / Жариков М.В. / Publishing House: OOO "KnoRus" (Moscow). 354 p. ISBN: 978-5-406-07635-4). The expert board recommends studying economics and finance at bachelor programs in higher schools.

A group of professionals reviewed the textbook and included Zbigniew Mierzwa, Doctor of Economics, retired adjunct of the University of Warsaw, the editor at the Review of Business and Economics Studies; Yelizaveta S. Sokolova, Doctor of Economics, Professor at the Financial University under the Government of the Russian Federation; Vladimir N. Kostornichenko, Doctor of Economics, Professor at the Moscow State Linguistic University; Vyacheslav V. Karlusov, Doctor of Economics, Professor at the Moscow State Institute (University) of International Relations under the Foreign Affairs Ministry of the Russian Federation.

2 Textbook Structure

The underlying textbook consists of eleven chapters describing the current issues in world finance. Chapter 1 "Introduction to international finance: basic terminology" looks into the significance of international finance, types of assets in the international financial markets, the value of the financial assets as well as financial markets dynamics, basic characteristics and market participants (The textbook, pp. 12-23). This course's objective is to convince the reader that they do not have to be super smart or super lucky to be a successful investor. Investing well is not about using fancy models or being full hardy; like many things in life, it is about mastering the fundamentals. Here is an example about one of the most brilliant investment decisions that the international financial markets know so far.





МИРОВЫЕ ФИНАНСЫ WORLD FINANCE

Рекомендовано Экспертным советом УМО в системе ВО и СПО в качестве учебники для направлений бакалавриата «Финансы» и «Экономика»



First of all, the book is going to start making the case that the basic ideas behind investing are sensible and easy to understand. Then the book is going to talk about the risks of investing. It will tell the reader the most serious threats to the investments and explain why they are so bad. But the book also demonstrates that there are sensible and effective ways to protect investments from these risks. By the end of this chapter, the reader will have a better picture of what they are getting themselves into when they invest — the good things as well as the bad. And hopefully, any sense of frustration or dread that the reader associates with investing will start to fade and may even be replaced by a little excitement. There is hope all this talk about risk makes someone feel better about investing because it should (Boddin, Stähler, 2018).

Understanding the main risks to invest in is the first step toward managing them. And one has learned that there are simple and effective ways to manage these risks. This chapter has also provided an opportunity to learn some of the fundamental ideas of investing. During the rest of this textbook, one will build on this foundation by learning about different available investments and how to choose the ones that are best for the investor (Beetsma, Giuliodori, De Jong, Widijanto, 2016). The reader will also learn about different investing strategies so that he/she can act to protect themselves from risks and also take good advantage of good opportunities. And they will learn some financial planning tools. They can help one reach financial goals. If the readers take their time to learn the fundamentals of investing and make their own investment plan, then they will feel prepared to make investment decisions and manage their investments. So, they can stop worrying now and start investing.

Chapter 2 "The national systems of currency, finance and monetary policy" is about the Federal Reserve of the United States and the U.S. national system of currency, the Gold Standard as a central bank for a country, the Federal Reserve System during the Great Depression, the Federal Reserve after the Bretton Woods the Federal Reserve anti-inflation policy, the Great Moderation in the U.S. monetary policy as well as the housing bubble as a prelude to world financial crisis of 2008 (The textbook, pp. 24–69). This chapter provides an extraordinary opportunity for the students to

gain insight into the U.S. central banking system in a wide range of issues that affect this country and the world.

The chapter is going to talk about the Federal Reserve and the Financial Crisis specifically. When one talks about the issues that just occurred in the last few years, it makes the most sense to think about it in a broader context of central banking as has taken place over the centuries. So, even though the chapter will be focusing a good bit of the contents quickly on the financial crisis and how the Fed responded to it, one needs to go back and look at the broader context (Cohen, 2012).

Hence as the book will talk about the Fed, it will also be talking about the origin and mission of central banks in general. And it is going to look at previous financial crises, most notably the Great Depression and see how that informed the Fed's actions and decisions in the recent crisis.

The chapter then discusses what central banks are, what they do, how central banking got started in the United States, and some history. It will talk about how the Fed engaged with its first great challenge — the Great Depression of the 1930s.

The next chapters will take up the history. They will review developments in central banking and with the Federal Reserve after World War II, talking about the conquest of inflation, the Great Moderation and other developments that occurred after World War Two. But it will also spend a good bit of time talking about the build-up to the crisis and some of the factors that led to the crisis of 2008–2009.

The next chapter will get into the more recent events. It will talk about the intense phase of the financial crisis with causes and implications and particularly the response to the crisis by the Federal Reserve and by other policymakers. And then, finally, the book will look at the aftermath. It will talk about the recession that followed the crisis, the policy response of the Fed, including monetary policy, the broader response in terms of changes in financial regulation, and a little bit of a forward-looking discussion about how this experience will change, how central banks operated, and how the Federal Reserve will operate going forward (De Haas, Horen, 2011).

Chapter 3 "International foreign exchange market," tells about the phenomenon of foreign assets and the basics of foreign exchange trading (The textbook, pp. 70–81). In this chapter, the author is going to branch out into the assets that investors may also want to consider. Some of the assets the reader will learn about in this chapter are ones that can be considered must-haves for an investor's portfolio. Others are optional, and there will even be tossed in a few assets that the reader hears about a lot, but sometimes it is best off if the reader avoids them (Johnson, 2013).

In this chapter, there are actually included both must-have investment and one to avoid. And they are both different types of foreign assets. It is time that the textbook got into some more details about what they can do for investors.

The chances are that if someone is holding well-diversified mutual funds, or if a pension covers someone, they already have some foreign assets in their portfolio. After all, there are plenty of global blue-chip firms that are not headquartered in the U.S., like Toyota or Adidas or Petrobras. And bonds from foreign companies or foreign governments can also offer safe and attractive returns. But most of the investors, when it comes right down to it, would rather invest in companies that are closer to home (Kadayan, 2014).

As promised, the chapter will turn to the foreign asset that one should probably avoid investing in — foreign exchange. Foreign exchange, also known as foreign currency trading, or simply forex trading, can seem really attractive. It is one of the largest and most active asset markets on the planet. Each day about five trillion dollars in currencies get traded, i.e. two and a half-trillion dollars of various currencies are traded for two and a half-trillion dollars of other various currencies. And the rates always seem to be moving up and down. It seems like there are plenty of opportunities for traders to make money. And some of the most legendary trades involve large bets on the direction of exchange rates (Dorrucci, McKay, 2011).

It is easy to lose money if exchange rates change. And they tend to bounce around quite a bit. Judging by the surge in ads in the past few years, it seems like there has been an explosion in interest in the carry trade among retail investors. And even some newcomers used to dream about being able to do this trade in the abstract.

But again, this strategy boils down to buying currency and using a lot of leverage. It is just as easy to lose a lot of money as it is to make it.

The upshot of it, of course, do not to try this at home.

In the end, remember the idea of investing in real assets. There are plenty of amazing opportunities outside the U.S.— about 80 trillion dollars' worth, according to the statistics one saw earlier. And they are all rooted in real assets.

Do invest abroad but do not invest in money. Invest in the companies and projects that make money, no matter what colour the money is or what kind of funny picture they put on it.

Do not overweight foreign markets since many of them have a lot of growing up to do, but do make enough room in the portfolio that one can benefit from their growth and development as well as from the diversification protection that they offer.

Chapter 4 "International and regional systems of currencies", is a useful guide on the development of the international system of currencies, the history and the major features of the regional system of currency, the U.S. dollar as a world currency and the prospects of the U.S. dollar in the international monetary system (The textbook, pp. 82–111). Winston Churchill once said that 'the further you look into the past, the further that you can see into the future.'

This chapter is all about creating one's own crystal ball, being able to gaze into the future, being able to change this crisis, the greatest crisis in the history of humankind, into one's great opportunity.

Studying the financial markets leads all the way to studying the economy. And when one starts reading about the global economy, the people concerned with trade deficits and budget deficits are the hard money advocates and the gold community they encounter. And once someone starts reading them, they also write about monetary history, and then the reader realises that monetary history just repeats and repeats over and over again, echoing

all the way back to the beginning of civilisation (Gourinchas, Obstfeld, 2012).

It is one of the most predictable hidden secrets of money, which some economists call the seven stages of empire. It is a long-term cycle that echoes throughout history right to this very day and is basically a societal pendulum that swings from quality money to quality currency and back again to quality money. It always plays out in seven stages. It always ends with gold delivering a knock-out blow to debased currencies, and it goes like this:

Stage One: A country starts with good money that is either gold or silver or backed by gold or silver.

Stage Two: As it develops economically and socially, it begins to take on more and more economic burdens adding layer upon layer of public works.

Stage Three: As its economic affluence grows, so does its political influence, and it increases expenditures to fund a massive military.

Stage Four: Eventually, it puts its military to use, and expenditures explode.

Stage Five: To fund a war, it steals the wealth of its people by debasing their coinage with base metals or by replacing their money with the currency that can be created in unlimited quantities.

Stage Six: The loss in purchasing power of the expanded currency supply is sensed by the population and the financial markets, triggering a loss of faith in the currency.

Stage Seven: A mass movement out of currency into precious metals and other tangible assets takes place. The currency collapses, and gold and silver rise in price as they account for the huge amount of currency created.

This process transfers massive wealth to those who had the foresight to position themselves beforehand in real money — gold and silver (Lane, Milesi-Ferretti, 2011).

A very interesting phenomenon which comes out here is that every 30–40 years there is a different monetary system, sometimes 30 years, the other times 28 years, 39 years plus, which means that probably the world is going to have a new monetary system in this decade or the next one. The world is going to experience a huge deflationary crash. The world will probably end up with a new monetary system, probably

after governments try and print their way out of this and cause hyperinflation of all the currencies. And people will just lose confidence in the currency. And what do they always go back to, throughout history, time after time, for the last 5,000 years? Actually, they always went back to gold and silver (Khan, Zhao, Zhang, Yang, Haroon, Jahanger, 2020).

In a world of floating currencies — which is what all national currencies are today — they move up and down relative to each other, but they are all sinking relative to gold. That includes dollars as well as the euro and the British pound, and all the others. They are going to continue to lose value and continue to lose purchasing power (Milesi-Ferretti, Tille, 2011).

Some economists think there is no way of avoiding what is coming. There is no way to fix it right now. There is only a way to either let someone drop out or to benefit from it. And what is needed to do right at the moment is to make sure that it is not just a few of the big investors in the world that are going to end up with all the profits. It is quite necessary to make sure that there are as many small investors as possible that are benefitting from it, because that is what makes society run, i.e. the middle class and a small investor (Obstfeld, 2011).

From the previous chapters, it became clear that the dollar-gold standard was put in place by a series of accidental events that were very fortunate for the United States because it gave it an advantage over the rest of the world. But the politicians over the past decade or so have abused this privilege as though it was their birthright. And the rest of the world are turning their backs on the U.S. dollar standard. It is going to cause a financial calamity the likes of which the world has never seen before. And it is going to be devastating for most people. Some of the damage has already been done. So, this chapter is going around trying to alert people and show them how they can protect themselves and turn this into a great opportunity for themselves.

There is always one result from what the countries of the world are doing right now — expanding the currency supplies all over the planet — that is higher gold and silver prices. The world has got to get back to free markets, free people and sound money. U.S. history

proves that this is the road to maximum prosperity (Ostry, 2012).

The chapter provided several astronomical prices for gold someday in the future. But it is not the question about the price measured in dollars; it is the question of how much its value is, what it is worth, and how much stuff it can purchase. The price measured in dollars or any currency, for that matter, is just a combination of numbers. And it really does not mean anything. Some numbers are created by the world's central banks, by the commercial banks' system, and people are forced to transact in these currencies (Patil, Kulkarni, 2011).

The next chapter is going to clear away the veil off national currencies and show how the world monetary system really works and how all national currencies will continue losing value. They can't maintain purchasing power over any reasonable period of time.

As for the golden nails in the dollar's coffin, there is already much more of them. But the truth is that like many times before, there are brief moments in history where the safest asset class or the safe-haven investment for the last 5,000 years also becomes the asset class that has the greatest potential gain in purchasing power.

The previous chapter was dealing much with the swap lines to bypass the U.S. dollar. The East — West cycle, the maximum spending demographic, the wealth distribution cycle, the household debt-to-income-ratio cycle, the stock market cycles, the Kondratiev wave, and the world monetary systems are all pointing to a massive deflation that should be coming in the future. In Japan, they are trying to beat deflation by just expanding the currency supply, and it does not work. Some Keynesians think it will work. But Japan has been trying it now for two decades. And it has not worked yet. And so, now the U.S. is trying (Reinhart, Rogoff, 2011).

It is starting to fall apart. And it is falling apart at an increasing rate. It is happening faster and faster. This chapter will try to explain why there is deflation coming. And it is coming soon.

The U.S. dollar standard as the world reserve currency is going to be abandoned someday. Its days are numbered. The previous chapters elaborated on the death of the dollar standard. And the world is getting closer and closer to that day. And it seems like every week now, there is another nail in the dollar's coffin. This is just an update on that and the progression of it (Rousseau, Wachtel, 2011).

The previous chapters also dealt with how the world monetary system has had evolved, and they showed that every thirty to forty years, the world has a brand-new monetary system. And people did not know that they are going to go through that and that they will go along with pressures build up in the monetary system. It starts to develop stress cracks and implode. There have been emergency meetings of a bunch of financial ministers during the G20 summits. And they are trying to come up with a new world monetary system.

Chapter 5 "The World financial crisis", is talking about the years of the Great Crash, the Financial Crisis of 2008-2010, the Federal Reserve's response to the financial crisis, major bankruptcies in the U.S. financial system, money-market funds in the U.S. financial system, the Federal Reserve's bailout programmes as well as the Great Euro Crisis (The textbook, pp. 112–181). After having studied the origins of the financial crises in the 1930s, this chapter is devoted specifically to financial globalisation and financial crises in the early 21st century. It is obviously a topic that everyone is interested in after the global financial crisis of 2008–2010, the worst global financial crisis since the Great Depression. Its effects are still felt across the world. Both industrial and emerging countries still suffer from high unemployment. In some of them, GDP has not yet reached pre-crisis levels. And this global crisis — if it were not enough was followed very quickly by the Eurozone's sovereign debt crisis, which despite the fact that Ireland and now just recently Portugal have returned to private borrowing markets, is not resolved at all and is pretty much in remission but could come back.

The global crisis is absolutely huge in its effects. It is very obvious, and then the euro crisis, which like many crises can be seen most clearly with its effects in the euro area, but arguably their spill-overs to developing world as well became greater over this period as countries became more highly linked not only by trade

but importantly in view of financial markets (Kasekende, Brixova, Ndikumana, 2010).

In fact, the above events are all different sorts of crises with very different effects. A lot of banking distress marked the recent crisis. And so, banking crises are one prominent form of crisis. Banks have short-term liabilities but tend to hold longer-term assets or more illiquid assets. They provide liquidity to depositors and other short-term creditors. But if all of those depositors or creditors demand repayments at once, the bank is going to have a lot of trouble meeting those obligations. When this happens on a large scale, banking crises arise.

Governments sometimes default on their debt obligations. Most recently, one saw a very well publicised technical default by Greece in the Eurozone. Still, other countries default all the time, particularly in the developing and emerging world, and, of course, even in the U.S.

Chapter 6 "World finance regulation and International Financial Institutions", is committed to the role of the United Nations Organisation in Reforming the Global Financial Architecture, the regulatory framework of international finance after the global financial crisis of 2008-2010 and regulating consumer financial products: Evidence from credit cards (The textbook, pp. 182–239). This chapter presents the leading thoughts and views in contemporary economic science on how to move to a more stable economic and financial architecture. This chapter contributes to macroeconomic and monetary theory to the development of economic and trade theory. It helps to explain the circumstances in which markets do not work well and how the elected government interventions can improve their performance. This chapter also examines international monetary and financial system reforms required to respond to the recent global crisis. The recent crisis has been clearly the worst crisis since the Great Depression. And the response to the crisis has been very distinctive and unique. At the very beginning, it was quite clear that the kind of global architecture that the world had before the crisis in terms of responding to global problems was inadequate. The major form of the discussion was the G7. And the good news was that the G7 recognised that it was not up to the task.

When one sees a very big stimulus package, one should not be misled. It's being offset by what is happening at the state and local level. But the real problem is 2020. When the federal stimulus ended, there was a need for a second stimulus, but because of the way that the money was misspent on the bank bailout, it is going to be very difficult to get a second round of stimulus (Salisu, Akanni, 2020).

So, all of that says that the potential for a robust recovery within the United States is a bit limited. But part of the problem is that the government has not done anything about the two underlying problems, i.e. the growing inequality that was mentioned within most countries of the world or the problem of the reserves, the growth of global reserves (Tripathi, Kaur, 2020).

Obviously, based on the crisis and what happened and the effects that the world is still feeling, it is now clear that maintaining financial stability is just as an important responsibility as monetary and economic stability. Indeed, this is very much a return to where the Fed came from in the beginning. Remember, the reason the Fed was created was trying to reduce the incidence of financial panics. So, financial stability was the original goal of creating the Fed (Vayanos, Woolley, 2013).

The U.S. has come full circle. But financial crises will always be with the countries of the world. That is probably unavoidable. There have been financial crises for 600 years in the Western world. Periodically, there are going to be bubbles or other instabilities in the financial system. But given what the potential for damage is now, as one has seen, it is really important for central banks and other regulators to do all that they can (Yu, 2014).

The regulators should try to anticipate or prevent a crisis, but if a crisis happens, to mitigate it and make sure the system is strong enough, it will be able to make it through the crisis intact.

Chapter 7 "The International securities market" looks into the international aspects of trading in stocks, equities and related assets and the fundamentals-Based Analysis of International Market of Stocks (The textbook, pp. 240–260). This chapter is going to start to take an in-depth look at different types of invest-

ments. Although there are literally thousands of different financial products for people to invest in, most are made up of the same basic few types of financial instruments.

So, one can consider this chapter the introduction to the main building blocks of investments. Later in the course, there will also be an introduction to a few more building blocks that one might want to add to the set. But the wants that are shown here are what can be considered essentials. And the investment the chapter wants to start with are stocks.

At this point, the chapter has covered just about everything one needs to know about stock investing except which stocks to pick.

The chapter allowed to learn some key facts about how actually stocks work, and some of these ideas will help the readers later when they will learn about stock pricing.

The reader also learned a lot of important details about how stocks are traded. It is hoped that this information about stocks has helped the reader feel more comfortable with the idea of investing in stocks and other financial assets as well.

As was said at the beginning of the chapter, one really does not expect the reader to want to start investing career here, but it is hoped that at this point, the reader is not really out the possibility that one might find a great company that one wants to own a piece of. In future chapters, there will be given you a lot of information about how to find a great company or two.

Chapter 8 "The International debt and bond market", is about the basic notion of international credit and international strategies of trading in bonds (The textbook, pp. 261–272). The previous chapter introduced stocks by pointing how stocks are risky but fascinating. This chapter is turning to bonds.

Bonds do not have quite the same reputation as stocks. In fact, they might seem boring. It is true that bonds are not necessarily the most lucrative investments out there, but they are extremely important. And if one gets to know them a bit better, one will see that the variety and dependability of bonds can make them a very useful investment to have in the portfolio.

Bonds also play a starring role in economic policy. Bonds enable governments to borrow.

And there are also the tools that central banks, like the Federal Reserve, use when they want to expand or shrink the money supply.

The bond market has become so large that governments have to worry about how it will react to their decisions. In fact, an advisor to President Bill Clinton remarked early in the Clinton presidency that he would like to be reincarnated as the bond market because it was the only person who could tell the President what to do.

In this chapter, the reader will learn the key features of bonds that make their returns more predictable and dependable than the returns on stocks.

This chapter is going to focus on how to pursue a buy-and-hold bond investment strategy. But the chapter will come back to active bond investing in future chapters. Although the returns on bonds might seem boring, it is clear to see that bonds themselves are really very interesting. And besides, when it comes to investment returns, a little bit boring is not such a bad thing.

The chapter focused on being a buy-and-hold bond investor. If the reader is going to follow this strategy, one will face increased default risk, inflation risk and liquidity risk. One can shrink the default risk by holding U.S. Treasuries or other government bonds, and one can mitigate the effects of inflation and liquidity risk as well by the laddering of the bonds.

If the reader follows these steps, then the biggest risk that one will have to live with is probably reinvestment risk. That means that one will always be looking for good opportunities to invest the coupon payments that one will receive. Find a good place to invest all that cash coming in — not a bad problem to have. Sometimes boring looks pretty good.

Chapter 9 "The International insurance market", is devoted to international instruments applied to insure financial assets and international insurance as a phenomenon provided and produced through diversification (The textbook, pp. 273–284). The reader has already learned about most of the essential investment opportunities and issues that one should be aware of. But there are still a few important issues and products that one needs to cover. And most importantly, one needs to

think about a big picture or rather a personal big picture.

In the past few chapters, the reader has been learning about financial instruments, including when to sell the investments. This chapter is going to stick with this theme of financial instruments and get into some of the practical issues that one will need to deal with as one will have to insure the instruments that one holds, i.e. one should learn how to turn the financial plan into financial reality.

In this chapter, the reader has learned about allocating investments across all the tax-advantaged savings and insurance plans to find the right place to hold all the great investments the reader has been learning about in this course. And the reader learned about how important it is to get all the investment information organised into one place so that one can do an annual portfolio tune-up. And finally, retackle the big question of how to invest after one reaches retirement.

The chapter has demystified annuities. The reader has learned the simple do-it-yourself-alternative that one can use to manage their own retirement income or do comparison shopping for annuities.

The reader has come a very long way in this course. One may remember that one of the first chapters was about how to stop worrying and start investing. It is hoped that by now, the reader has stopped worrying and is excited to look for the right kinds of investment opportunities.

In this course, the reader learned about a full range of products that all investors should at least consider. It is hoped that the course has changed the reader's mind about a few investments that were thought too dangerous or too boring to consider before. And the textbook also showed a couple of attractive investments that it is hoped one was not aware of before.

More importantly, it is hoped the textbook has convinced the readers that they can chart their own path to investing success. No matter what they believe about market efficiency, no matter how risk-averse they are and how much or how little time they have to devote to investing, there are many good investment options to suit their particular needs. There is no need to follow the crowd. Do what is best for personal use.

It is essential that the readers put some time on their side by investing sooner or later and making a long-term commitment to regular investing. It is hoped that this course has made the readers eager to get their current investments organised and to make plans for their future investments. In other words, it is hoped that the reader really feels prepared now to find good investment opportunities and take advantage of them. And it is also hoped the readers feel confident that they can use what they have learned in this course to reach their financial goals.

Chapter 10 "The International Movement of Capital", gives a basic idea about the free international flow of capital as based on the efficient markets hypothesis and the factors affecting international investments and international investment opportunities (The textbook, pp. 285–296). In the first chapter, the reader learned about several threats to the investments, including the wild ups and downs of the market. But one should know where some people see the threat when others see opportunity. Some people see dollar signs in those market swings, especially the upswings. And they are convinced that they should be able to make a fortune from them. Maybe not a fortune, do not be too greedy. All they really need to do is beat the market.

Beating the market is what every investor dreams about. That is what it seems like, judging by all the books, magazines, T.V. shows, websites, blogs, podcasts, live seminars and of course, spam e-mails devoted to the subject.

For example, one can do a quick search through the book section of Amazon.com and find over one hundred books that have the phrase beat the market in their title. And that does not even count the variations on that idea like Peter Lynch's bestseller called Beating the Street.

If all these different authors claim that one can beat the market, can they all be right? If they are, then there must be hundreds of different ways to beat the market. That makes beating the market sound pretty easy. But if it is so easy, then why do people need all these books on investing in telling them how to do it? These are the sort of questions the chapter is going to discuss.

In fact, the chapter is going to take an indepth look at the two really big questions that sum up all these smaller ones that have been just raised. The first of these questions is simply: Can anyone beat the market? The second then, of course, is: If someone can beat the market, how does one do it?

So, in this chapter, the reader has learned about a big decision one has to make as an investor. Do the reader think markets are highly efficient and cannot be beaten? Or does the reader think there is room for investors to beat the market by exploiting inefficiencies or correcting irrational behaviour?

If someone thinks markets are highly efficient, then their investing path is very clear. Do not try to beat the market. Join it. And if someone thinks the market can still be beaten, then they have another decision to make. Are traders willing to put in the time and effort that it takes to find those market inefficiencies? One may find out that the answer is yes. After all there is a great sense of satisfaction in being proven right and making money in the process. But it is also okay if the answer is no. The main point to remember is that traders can reach their investment goals no matter what their opinion is about market efficiency.

Chapter 11 "Russia as part of the world financial system", is specifically committed to the global economic and financial environment for contemporary Russia, the Russian ruble in the international and regional dynamics as well as the prospects of creating an international financial centre in Russia (The textbook, pp. 297–328).

The sad thing, of course, about this chapter is that it is the last one. And the book's author hopes that everybody who has been reading it has really enjoyed this very much, and it has been a terrific experience, a learning experience, academically and intellectually as well as just an experience to be amidst of this event which is as well as being in class. And so, the author hopes that the reader is looking forward to the final discussion of the aftermath of the crisis.

In this chapter, the purpose would be to understand the specifics of the Russian economy; to study the barriers which may be put in place preventing Russia from becoming a great economy; to analyse the industrial base of Russia,

its international companies being a driving force of the Russian economy abroad; and the chapter will also strive to answer the question whether Russia indeed becomes an economic superpower by the mid-21st century like Goldman Sachs predicted back in 2003.

The major conclusions of this paragraph come out of the hypothesis that direct settlements between Brazil, Russia, India and South Africa, on the one hand, and China on the other, will lead to the creation of a new offshore centre of the yuan in Moscow by means of circulating currency vehicles traded at the Moscow Exchange. The author hereby proves based on calculating the values of Brazilian, Russian, Indian and South African exports to China and imports from China that if more favourable conditions to buy and sell the yuan at the Moscow Exchange are provided in contrast to the terms offered by the central banks, the authorised commercial banks and the Chinese Foreign Exchange Trading System (CFETS) as well as in comparison with the terms of trading in yuan by means of swap agreements between the BRICS' central banks, then the non-Chinese BRICS exporters and importers will be more active in purchasing the yuan-denominated currency vehicles at the Moscow Exchange to transact with Chinese counterparts, so that not only the yuan will gradually become a more internationalised currency but also the rouble, and Moscow will become a new yuan's offshore centre and later an international financial centre.

The textbook is going to stop lecturing at this point and get out of the reader's way, so one can get out there and do just that: good luck and a happy financial and investing career.

3 The Methodology of the Textbook

The **General Strategic Purpose** (GSP) of teaching world finance at the Financial University in Moscow (after that, the Financial University) is to accumulate professional skills and language fluency in the field of world finance. Professional skills in world finance can only be learned through a **step-by-step approach**, with specific tasks and functions at each stage being both dictated and dominated by the GSP.

In order to realise the GSP, world finance teachers, who will eventually end up using this

textbook, should keep in mind the following **OBLIGATIONS**:

- A teacher should understand first of all the level of students' financial fluency in terms of the general economic and financial categories, for they come from various backgrounds with quite different skills and knowledge;
- Therefore, a teacher should implement a variety of entry, intermediary and final tests on a monthly, half-yearly and annual basis to find a way forward in teaching world finance;
- A teacher should use English in class and elsewhere communicating with students as much as possible;
- A teacher should divide the students into subgroups if possible and develop and think of special means to help weaker students improve their fluency in finance;
- A teacher should use as many teaching techniques as possible applying visual materials;
- Teachers should exchange teaching techniques, strategies and experience with each other;
- A teacher should make use of a diversity of discussion topics to help students communicate and express their ideas in a variety of financial fields keeping in mind the special field of their interests being international economics, business and finance;
- A teacher should preferably use the textbooks and teaching materials prescribed by the curriculum;
- A teacher should make sure that by the end of the course, the students are able to express themselves correctly in international finance.

Achieving these objectives **IS NOT POS-SIBLE** without systematic and regular class attendance on the part of the students. Therefore, the teachers should control the students' class attendance and warn the administration of their systematic absence.

Teaching world finance is a **highly interactive process** that involves attention and participation on part of both the teacher and students. This process is organised through various class and extracurricular activities, such as:

1) reading economic and financial texts and articles;

- 2) translation from Russian into English to be able to conduct individual studies in international finance;
 - 3) listening activities in class and home;
- 4) writing skills: essays in international finance and business correspondence;
- 5) speaking activities in class under the teacher's supervision.

Teaching world finance at the University of Finance should pursue the following **AIMS**:

- 1) provide the basis for knowledge of facts in international finance;
 - 2) encourage the development in students of:
- a) a facility for self-expression, not only in writing but also in using additional aids such as statistics and diagrams where appropriate;
- b) the habit of using works of reference as sources of data specific to economics;
- c) the habit of reading critically to gain information about the changing economy in which people live;
- d) an appreciation of the methods of study used by economists and of the most effective ways in which economic and financial data may be analysed, correlated, discussed and presented.

Classroom activities which could be used to develop the AIMS of teaching and studying world finance

A teacher is free to use any classroom activity he/she could think of to achieve the stated Curriculum AIMS. Here there are general classroom activities they could use in their everyday practice.

One of the most important things in providing the basics in world finance is the ability of a teacher to ask relevant questions. A correctly asked question is usually half an answer. For example, a good way to start teaching world finance is asking students how they understand the difference between the two major notions in the subject, i.e. 'What is financial economics?' and 'What is a financial economy?' because these two concepts are translated equally into Russian, though eventually, they mean different things. When the students understand the distinction, they will be immediately able to say what they are going to study and why it is of crucial importance to them, for financial economics is a science of how to make things

work better in a financial economy. After that, the students will know that their function in their home country is to make the lives of people better and happier as future economists. Then the purpose of studying world finance will be clearer to them. And the purpose is to learn ways, means and techniques of providing wealth to the majority of the population in their home country.

Statistical data is the basis of world finance. Economic problems can only be solved when the students see what is wrong with the data. They should be able to make clear what these figures mean to them personally because economists could be clients and customers and scientists or producers at the same time.

That is why the repeated use of statistics is so important in studying world finance. One of the methods to nurture the students to look through various statistical data is to make them complete simple tasks. For example, a probable home task here could be asking the students, 'What are the biggest corporations in Russia?' The teacher tells them, 'This could be found in the rating of Fortune Global 500 on the Fortune's official website'. The teacher then may encourage the students to search for that data by telling them that they can work for those companies in the future and get a competitive salary and that in order to apply for a job in such a company, they should at least know those firms' names.

There are many notions in finance. Some of them, such as inflation, oil prices, economic growth, exchange rates, etc., are of everyday importance, for if they change, our lives will also change. The greater they vary, the more dramatic the effects on people's lives they will produce. To make sure the students are aware of this current information, the teacher should ask them each lesson, for example, 'How much does crude oil cost today', or, 'What is the exchange rate of one Russian rouble to the U.S. dollar?'

If the students are encouraged to collect such data every day, the teacher may ask them to **organise the figures in tables**. Then the teacher explains to them that there is a method of predicting how, for example, the exchange rate of the rouble to the dollar fluctuates in a given period. The teacher, in his/her turn,

writes a mathematical formula on the white/blackboard and tells the students this is a simplified way of how the FOREX market operates and that they, by making use of the formula, may participate in it, thus persuading them that there is a practical use of the economic methods they study.

The recommended classroom activities would help to develop the curriculum AIMS because:

- 1) The first suggested classroom activity **asking relevant questions** establishes the right direction in the course of studies for the students. As time passes, they will learn how to see through a difficult text to achieve a particular aim because they will know the roadmap;
- 2) Secondly, as organising statistical data is the key to understanding economic problems, the ability to construct diagrams or economic tables is one of the ways to meet the course's goals, that is **encompassing fundamental knowledge in world finance** for the students;
- 3) Thirdly, when the students are used to collect and memorise current economic and financial data as well as make practical sense out of the data, they will be able to formulate an economic problem in one sentence at least. When formulated, economic problems can be better understood and solved by subdividing them into a group of tasks to be accomplished. Fulfilling these subtasks one by one, the students will be able to develop an ability to solve aggregate economic problems;
- 4) Fourth, economists are usually sceptic or pragmatic sorts of people who question each event and think something that is happening is not true. Therefore, developing the aims of the course means teaching the students to **scrutinise each and every aspect of everyday life**. A major question for an economist is, 'Why is it so and not otherwise?' Economists should also be the sceptic in times of prosperity when nobody thinks that there will be a crash on the stock market tomorrow. They should be able to predict that;
- 5) Finally, in order to predict something, the students should be aware of the methods used to foresee future economic events. In this way, solving mathematical equations is a way to achieve the course's goals.

Can more than one Curriculum AIM be met with a single classroom activity?

It would be an ideal style of teaching if at least two aims of the course could be achieved just by one of the above classroom activities. A suggested answer here could be that **asking provocative questions** can provide an opportunity for the students to express themselves clearly and learn the basics of world finance at the same time.

Are any of your current classroom activities meeting these AIMS?

This is a really important question to ask yourself when teaching world finance. Basically, even if one of the course's aims cannot be achieved by the above classroom activities, there is no use in teaching world finance under the circumstances such as these, because this particular course of studies is an **integrated learning process**, and if its major aims cannot be achieved, the students will not be able to make any sense of it and will never become true economists.

Can any of your existing lesson plans be adapted to meet these aims?

It is a different situation when a teacher improves and develops his/her classroom activities on a day-to-day basis. His/her plans should always be adapted in order to find an **optimal** way of achieving the course's GSP and AIMS. In this particular situation, any teaching method of trying to find alternative classroom activities that could help achieve two or more of the given AIMS simultaneously would actually be an ideal means of a lesson plan's adjustment.

The textbook is structured in a way to give the general idea of the contemporary global financial system. It consists of eleven chapters, each of which has a specific area of world finance to describe. It starts with theoretical issues on financial assets used in the world of international finance. It then outlays the foundation of international financial relations. It contains chapters on the specific roles of central banks and many other important financial institutions, including the International Monetary Fund and the World Bank.

The textbook has some practical issues to discuss, such as crisis management during the most dramatic periods of world economic history, such as the Great Depression, the Asian

Teaching Strategy	Skills	
Slow but steady progress	A strategy like this sets achievable goals, so that with a minor goal reached, students will be able to proceed in the course and fulfil future goals	
Using a combination of class activities, i.e. discussions, role plays, business games, making presentations, projects, brainstorming, etc.	This strategy develops a complex approach to the subject and trains specific skills	
Assigning projects	Such activity directs students to work not only in class but also at home and teaches them to be self-sufficient	
Interaction	Interaction between a teacher and a student through various means of communication, from simple e-mail contact to face-to-face total interaction, develops skills such as being sociable, communicative, without being afraid to get into the conversation. Using various interactions with no direct face-to-face contact, students can get in touch with their teacher any time and receive a consultation, should any problem occur.	

Financial Crisis and the world financial crisis of 2008–2010.

The textbook ends up with detailing the role of Russia and the Russian rouble in world finance.

4 Conclusion

The world finance course graduates from the University of Finance are expected to:

- 1) DEMONSTRATE KNOWLEDGE AND UN-DERSTANDING of the specific international financial content;
- 2) INTERPRET international economic and financial data presented in verbal, numerical or graphical form;
- 3) EXPLAIN AND ANALYSE international economic and financial issues and arguments, using relevant economic concepts, theories and information;
- 4) EVALUATE international economic and financial information, arguments, proposals and policies taking into consideration relevant financial information and theory, and distinguishing facts from hypothetical statements and value judgements;
- 5) ORGANISE, PRESENT AND COMMUNI-CATE international economic and financial ideas and informed judgements in a clear, logical and appropriate form.

Teaching methods/activities that might be used to develop each of these five assessment objectives

In order to develop the first assessment objective, it is very important to make sure on a regular basis that **students understand the economic and financial categories studied previously**. Usually, it is done through regular asking the students to define a particular notion of economics and finance in English. If answered wrongly, the teacher should put additional questions to manoeuvre him/her in the right direction. Sometimes it is not a matter of a student forgetting the correct answer. Still, when being excited a little bit by the difficulty of a question, the student mistakes one economic or financial category for another.

This technique of **helping or manoeuvring questions** can be a powerful tool in developing students' ability to demonstrate and understanding things.

It is a misconception that the students of financial science cannot interpret verbal, numerical or graphical information if they are starters in learning the subject. Finance is a practical, everyday science and not just a combination of some static notions and theories. The students of finance are pupils as well as consumers, clients or customers who are to take simple financial and economic decisions every day in a bookstore, marketplace, etc. They can always say something or express an opinion of theirs on particular verbal information if it is correctly formulated.

What are the advantages and disadvantages of each of these teaching strategies?

Teaching strategy	Advantages	Disadvantages
Slow but steady progress	a) It allows students with no knowledge in world finance to catch up with more advanced ones;b) A strategy of achieving objectives directly will create gaps in students' minds, and their competence will be discretionary	 a) Sometimes, it creates a feeling a higher goal is not achievable at all if it needs many stages to approach it; b) It consumes more teaching time than a strategy to reach direct goals
Using a combination of class activities, i.e. discussions, role plays, business games, making presentations, projects, brainstorming, etc.	It produces a complete picture of a student's competence in this particular course, for it does not only teach him/her to read and write but also listen to and communicate with each other	It requires a total commitment of a teacher to the course, for he/ she are to use each minute wisely, are to develop detailed plans for each lesson and eventually such a strategy takes lots of teaching time
Assigning projects	It develops in students the skills of working individually which is very important, for it is always promising when one does their job without someone to tell them what to do and how to do it	It requires both responsibility and commitment of students to the course, which is very difficult for a teacher to ensure
Interaction	Students can always turn to their teacher for help	It requires much spare time free of work and a teacher's personal time

Some students find it difficult to interpret numerical information. But **statistics data can be organised in the form of a graph**. And graphical information can always be easily interpreted because, if figures are organised in curves, the resulting graphs show increasing or decreasing trends, e.g. in supply or demand. So, when the students see the demand curve decreasing, they will immediately say that means the consumers stopped purchasing a particular product and vice versa.

Suppose the students know the basic economic laws, such as the laws of supply and demand. In that case, they will be able to critically explain and analyse particular economic issues and arguments they read in books on finance, business magazines or newspapers or hear some politician or economist say something on the radio or T.V. and make their own corrections afterwards.

The next stage can be accomplished only when the students are no longer starters in studying finance. That presupposes they have already mastered many economic laws and theories. A powerful tool here can be to make the students hypothesise. Intuition can help here at the initial stages. A teacher's role in this specific example is to promote and motivate the students to express any idea that occurs to their mind. And of the ideas generated by a team of students, those can be chosen that best correspond to the economic theories and laws they know.

To develop the final assessment objective, it is very important to **stimulate the students in making their own presentations** on the topic that is being taught in class at the moment. While preparing such presentations, it is crucial that the students use modern means of

demonstrating their economic theses, i.e. computers, slideshows or even video conferencing. The students should be given each opportunity to communicate with both their teacher and colleagues.

Suppose a world finance teacher realises the students are able to interpret the material that has been learned. In that case, he/she may go over to explaining to them the categories of the proceeding units. Otherwise, he/she could try to clarify why the students answered wrongly to certain questions. At this point, it is really crucial to look into the core of an incorrect answer because if the teacher finds it, he/she will definitely discover the means and techniques of helping their students generate proper knowledge of the concepts studied.

Different teaching strategies that a world finance teacher may use or plan to use as well as particular skills that are being developed by using them

The most important thing in achieving the aims and objectives of the course is progression. It is impossible to accomplish any of the required tasks and assignments without a step-by-step approach. It is why world finance teachers may choose slow but steady progress as core teaching strategies. It is followed by a strategy of combining different classroom activities, which will help students develop the skills required by the course. An ineffective teaching method here would be doing the same thing all the time at each lesson, e.g. reading and understanding a given text as it is usually done in the local language courses of study. Such a strategy develops nothing but reading skills, whereas

the approach prescribed here is to unite a variety of skills and train them simultaneously. This way, students will be more interested in the course, and they will not find the lessons boring.

Using the strategy of assigning projects, world finance teachers should try to develop creativity in the students and get feedback from them. Finally, taking the above strategies together, world finance teachers need constant communication with the students, for if there is no interaction, that will mean the teacher is not interested in his/her students achieving the course's aims and objectives, and the students will have to look for alternative studies.

Applying these strategies will always make world finance lessons more interesting. It will create in the students a desire to express themselves and communicate with their classmates on international financial issues. It will also develop in them many of the skills mentioned above, i.e., they will be trained to be good listeners. They will respect each other as a team of professionals and express themselves correctly, following their teacher's advice and comments. What may prevent world finance teachers from accomplishing these strategies is a constant need to find sufficient time, which is the commonest problem with teaching. A teacher may be required to use teaching time more wisely, to make the strategies work better, learn and find ways to manage it, and constantly contact people in the field and exchange experience with them.

Other teaching strategies that can be used in teaching practice may include connecting some parts of the learning process to a particular student's specialisation field, that is, the job he/she does on a regular basis.

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Мировые финансы: Презентация и обзор учебника

Михаил Жариков

КИДАТОННА

Учебник предназначен для студентов, изучающих современные финансы, и всех читателей, интересующихся данной проблематикой. Предложен оригинальный способ освещения широкого круга вопросов. Написан живым, интерактивным языком. Вопросы поставлены таким образом, чтобы заставить студента думать и самостоятельно искать на них ответы. Структура учебника, построенная по классическому образцу зарубежных пособий и учебников, состоит из одиннадцати глав, охватывающих весь спектр современных международных финансовых отношений. Каждая глава завершается вопросником для самоконтроля. Учебник насыщен фактографическим материалом и содержательными экскурсами в историю современных финансов, что позволяет читателю лучше понять теоретические выкладки. Издание учебника весьма актуально, особенно для студентов и преподавателей дисциплин по международным финансам на английском языке. Дополняет учебник словарь финансовых понятий и терминов.

Ключевые слова: международные финансы; дисконтирование; финансовая глобализация

ОБ АВТОРЕ

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Camera Obscura or the Way Things Appear: Some Remarks About Marx's Economic Writings

Zbigniew Mierzwa

ABSTRACT

I analyse the foundations of Marx's analysis to examine the applicability of Marx's theory of the capitalist economy to the study of current economic events. In this paper, I do not present critique the interpretations of Marx's works made by contemporary economists; however, much of modern Marxian economics is invalid in terms of Marx's own method and inappropriate for understanding modern capitalism. The paper is concerned with topics that have been the subject of contemporary debate and are central to Marx's own economic writings. Here I present only textual evidence of the main tendencies in the development of capitalism discovered by Marx. There are limits to value (= time) as the sole criterion of economic expediency; the constant reproduction of a scarcity of jobs amid an abundance of goods; enlargement of material commercial relations on the other spheres of social life; development of monetary relations — the emergence of derivatives of money, i.e., ersatz money, digital money. The main conclusion that I came to is that some societies are gradually losing value and moral guidelines, threatening the very development and even the existence of other communities or peoples.

Keywords: Karl Marx; value; theory of value; law of value; theory of money

JEL Classification: B 14, D 63, E 42 © Zbigniew Mierzwa, 2021

Introduction

There is not social form without a man.

A camera obscura is a darkened room with a small hole at one side through which an image is projected onto the wall opposite the hole. A small enough opening in a screen only lets through rays that travel directly from different points in the scene on the other side, and these rays form an image of that scene where they reach a surface opposite from the opening. But the image on the opposite surface is *inverted*. Technically, with the help of a convex lens, the image will be re-inverted. Moreover, in a camera obscura, the image on the opposite surface is inverted (upside-down) and *reversed* (left to right).

Marx did not be especially interested in a darkened room with a small hole as a physical phenomenon. He was interested in **social camera obscura**, deceptive visibility of appearance. What are the causes and mechanisms of the inverted and reversed mode of comprehension

(osmose) by man the surrounding reality? Marx has begun his analysis from the opposite side of the camera obscure — from the appearance side. Indeed, as Marx famously wrote, all theory involves explaining the observed (the exoteric) phenomenon by the unobserved (esoteric) one.

In the article "Karl Marx's Funeral", Frederick Engels wrote: "Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history: the simple fact, hitherto concealed by an overgrowth of ideology, that mankind must first of all eat, drink, have shelter and clothing, before it can pursue politics, science, art, religion, etc.; that therefore the production of the immediate material means of subsistence and consequently the degree of economic development attained by a given people or during a given epoch form the foundation upon which the state institutions, the legal conceptions, art, and even the ideas on religion, of the people concerned, have been evolved, and in the light of which they must, therefore, be explained, instead of *vice versa*, as had hitherto been the case."

"But that is not all. Marx also discovered the special law of motion governing the present-day capitalist mode of production and the bourgeois society that this mode of production has created. The discovery of surplus value suddenly threw light on the problem, in trying to solve which all previous investigations, of both bourgeois economists and socialist critics, had been groping in the dark." [MECW, vol. 24, pp. 467–8]

These achievements were possible when Marx discovered perverted (inverted) human perception of the surrounding world as a fundamental, social phenomenon. It was a great discovery and recommendations as concerns method of analysis of social relations — because the form of appearance makes the actual relation invisible and indeed presents to the eye the precise opposite of that relation.

The main tendencies and questions in the development of capitalism:

- 1. Value (= time) as the sole criterion of economic expediency. As Marx explained, "Under present-day conditions in the major industries and agriculture the variable capital is only a relatively small part of the total capital. For this reason, its increase or decrease, so far as either is due to changes in the variable capital, is likewise relatively small." [MECW, vol. 37, p. 62]
- 2. Poverty and inequality. The *differentia specifica* of the capitalist economic system the constant reproduction of a scarcity of jobs in the midst of an abundance of goods. It is the result of the dynamic of the crisis of the reproduction of the capital-labour relation.
- 3. Stimulation of emergence of new wants and needs. [marketing, advertisement induced (derivative) needs, tied needs] + product innovations. Consumerism.
- 4. Necessary products' basket is now available for everyone in developed. [Basic Income, MMT]
- 5. Free quantities of capital and labour ought to find employment in expanding markets, where rates of profit are higher, or come together in entirely new product lines, manufacturing products for markets that do not yet exist (production of new wants, internationalisation, globalisation).
- 6. Enlargement of material commercial relations on the other spheres of social life (com-

moditisation, commercialisation, financialisation).

- 7. Development of pure 'monetary' relations the emergence of derivative money, ersatz money, digital money.
- 8. Diminishing part of commodity circulation constitute money circulation.
- 9. Rising cost of circulation (marketing, advertisement).
- 10. Money of account as the heritage of money as money (real money).
 - 11. Is the end of capitalism inevitable?

Turn Back What is Turned Inside Out

What does it mean for Marx to turn Hegel from head on his legs? In Contribution to the Critique of Hegel's Philosophy of Law. Introduction Marx wrote: "This state, this society, produce religion, an inverted world-consciousness, because they are an inverted world." [MECW, vol. 3, p. 175] In Capital vol. I he wrote: "My dialectic method is not only different from the Hegelian, but is its direct opposite. To Hegel, the life process of the human brain, i.e., the process of thinking, which, under the name of "the Idea", he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of "the Idea". With me, on the contrary, the ideal is nothing else than the material world reflected by the human mind and translated into forms of thought. [...] The mystification which dialectic suffers in Hegel's hands, by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner. With him, it is standing on its head. It must be turned right side up again, if you would discover the rational kernel within the mystical shell. [MECW, vol. 35, p. 19]

Having begun to study the works of French and English economists in Paris in 1843, Marx immediately realised that political economy was also in captivity of an inverted consciousness. In a letter to Engels of 27 June, 1867 wrote: "Here it will be shown how the philistines' and vulgar economists' *manner of conceiving things* arises, namely, because the only thing that is ever reflected in their minds is the immediate *form of appearance* of relations, and not their *inner connection*. Incidentally, if the latter were

the case, we would surely have no need of *science* at all." [MECW, vol. 42, p. 390]

Marx was well aware that: "The method of analysis I have used, a method not previously applied to economic subjects, makes for somewhat arduous reading in the early chapters..." [MECW, vol. 35, p. 20] But, on the other hand, he admitted that "Now if I wished to *refute* all such objections *in advance*, I should spoil the whole dialectical method of exposition. On the contrary, the good thing about this method is that it is constantly *setting traps* for those fellows which will provoke them into an untimely display of their idiocy." [MECW, vol. 42, p. 390]

Two Layers of Dialectical Analysis

Marx never abandoned the law of value, that is, considering the labour time not only as a sole denominator of all kinds of commodities but also as the sole regulator of economic activity. Already in *The Poverty of Philosophy*, Marx formulated the universal one-criterial evaluation of the human activity. He wrote, "Time is everything, man is nothing; he is, at the most, time's carcass. Quality no longer matters. Quantity alone decides everything; an hour for hour, a day for day..." [MECW, vol. 6, p. 127]

Regrettably, he never completed an analysis where they assert themselves as coercive laws of competition. However, it is namely that perverted and inverted world of true social relations. Incomplete research cannot be judged — moreover, the unfinished part of it.

In the first volume of *Capital*, Marx wrote: "It is not our intention to consider, here, the way in which the laws, immanent in capitalist production, manifest themselves in the movements of individual masses of capital, where they assert themselves as coercive laws of competition, and are brought home to the mind and consciousness of the individual capitalist as the directing motives of his operations. But this much is clear; a scientific analysis of competition is not possible, before we have a conception of the inner nature of capital, just as the apparent motions of the heavenly bodies are not intelligible to any but him, who is acquainted with their real motions, motions which are not directly perceptible by the senses." [MECW, vol. 35, p. 321] The principal meaning of Marx's dual-layered analysis he already stressed in the *Grundrisse*: In short, here, all determinations appear in inverse order as compared with their appearance in capital in general. There price is determined by labour; here labour is determined by price, etc., etc. [MECW, vol. 29, p. 175]

As I already wrote, the key to understanding Marx's economic work is in his early writings. [Mierzwa, 2020, p. 78] In, written in the first half of 1844, Comments on James Mill Élémens d'Économie Politique Marx for the first time connected law of appropriation with money as an alienated social relation of production. Moreover, there are not two Smiths, namely the economist and the moral philosopher — there is one. And the same holds for Marx. His efforts in Capital we can best understand in light of his 1843–1844 Manuscripts. Even the sole act of exchange presupposes alienation, hand-to-hand transfer. Marx noted: "Objects separated from this mediator have lost their value. Hence the objects only have value insofar as they represent the mediator, whereas originally, it seemed that the mediator had value only insofar as it represented them. This reversal_of the original relationship is inevitable. This *mediator* is therefore the lost, estranged essence of private property, private property which has become alienated, external to itself, just as it is the alienated species-activity of man, the externalised mediation between man's production and man's production." [MECW, vol. 3, p. 212]

In one particularly explosive broadside, Marx speaks of the fetishism of commodities as "this false appearance and illusion, this mutual independence and ossification of the various social elements of wealth, the personification of things and conversion of production relations into entities, this religion of everyday life." [MECW, vol. 37, p. 809]. Mention has already been made of this development, which is also called "reification" (Verdinglichung), in the discussion of product alienation.

Use-value Matters!

Life is real and material. Marx limited his analysis to material production — the real metabolic process between man and Nature. Marx considers only material production, that is real, material objectification of man's labour, objectifying labour time in a use-value.

I am not a "physicalist". The exchange of products is a result of the exchange of labour. We change one use-value for another one in definite quantitative proportion. However, when comparing two products, i.e., two quantities in the physical unit, we simultaneously compare amounts of labour time, even if we do not know it.

Human material needs are determined not only by prices of commodities but also by other, very different circumstances.

In volume III of *Capital*, Marx clearly showed the principal differences and contradiction between use-value and value, i.e., between material and ideal. Only this joint analysis allowed him to discover why labour-time is the limit to the development of capitalism.

Account of physical dimensions of economic activity has had for Marx principal meaning. He wrote: "So far as its material elements are concerned, the total capital minus the variable capital, that is, the constant capital, consists of the material requisites — the means of labour and materials of labour — needed to materialise labour. It is necessary to have a certain quantity of means and materials of labour for a specific amount of labour to materialise in commodities and thereby to produce value.

This value is here altogether immaterial; it is only a matter of the technically required quantity. It does not matter whether the raw materials or means of labour are cheap or dear, as long as they have the needed use-value and are available in technically prescribed proportion to the labour to be applied. [MECW, vol. 37, p. 48] The same concerns consumption.

Time Is Gone and Never Return

The main question that faced Marx was the mechanism determining the necessary labour time. It is "[t]he general law and to the basis of political economy, that the values of commodities are determined by the labour-time contained in them..." [MECW, vol. 37, p. 311] This phrase we can find in *Capital* III. Already in *The Poverty of Philosophy*, Marks understood this question for himself when he wrote, "It is important to emphasise the point that what determines value is not the time taken to produce a thing, but the minimum time it could possibly be produced in, and the mini-

mum is ascertained by competition. [MECW, vol. 6, p. 136]

The commodity is not the thing! A commodity is a social form of the product of labour under capitalism. Marx wrote: A system of exchanges, exchange of matter if seen from the angle of usevalue; a change of form if seen from the angle of value as such. The product is related to the commodity as use-value to exchange value; the commodity is related similarly to money. Here the one series attains its peak. Money is related to the commodity into which it is reconverted, as exchange value to use-value, and to an even greater degree the same is true of the relation of money to labour. [MECW, vol. 29, p. 25] Moreover, If I convert 1/4 into decimals, positing it as 0.25, its form is altered, but this alteration of form leaves the value unchanged. Similarly, if I convert a commodity into the form of money or money into the form of a commodity, the value remains the same; but its form has changed. [MECW, vol. 29, p. 20]

Division of labour is the division of socially disposable labour-time. Even an individual must divide his/her daily, weekly or monthly fund of time. Marx illustrated this very clearly with the example of Robinson Crusoe. Since Robinson Crusoe's experiences are a favourite theme with political economists, let us take a look at him on his island. Moderate though he be, yet some few wants he has to satisfy, and must therefore do a little useful work of various sorts, such as making tools and furniture, taming goats, fishing and hunting. Of his prayers and the like we take no account, since they are a source of pleasure to him, and he looks upon them as so much recreation. In spite of the variety of his work, he knows that his labour, whatever its form, is but the activity of one and the same Robinson, and consequently, that it consists of nothing but different modes of human labour. Necessity itself compels him to apportion his time accurately between his different kinds of work. Whether one kind occupies a greater space in his general activity than another, depends on the difficulties, greater or less as the case may be, to be overcome in attaining the useful effect aimed at. This our friend Robinson soon learns by experience, and having rescued a watch, ledger, and pen and ink from the wreck, commences, like a true-born Briton, to keep a

set of books. His stock-book contains a list of the objects of utility that belong to him, of the operations necessary for their production; and lastly, of the labour time that definite quantities of those objects have, on an average, cost him. All the relations between Robinson and the objects that form this wealth of his own creation, are here so simple and clear as to be intelligible without exertion... [...] And yet those relations contain all that is essential to the determination of value. [MECW, vol. 35, pp. 87–88]

Perverted Consequences of Perverted Consciousness

What occurs in the real world is reflected in people's minds. Man's reflections on the forms of social life, and consequently, also, his scientific analysis of those forms, take a course directly opposite to that of their actual historical development. He begins, *post festum* with the results of the process of development ready to hand before him. [MECW, vol. 35, p. 86] The categories of bourgeois economy consist of such like forms. They are forms of thought expressing with social validity the conditions and relations of a definite, historically determined mode of production, viz., the production of commodities. [MECW, vol. 35, p. 87]

Therefore, the actual, everyday exchange relations and the value magnitudes *cannot be directly identical*. The point of bourgeois society is precisely that, *a priori*, no conscious social regulation of production takes place. What is reasonable and necessary by nature asserts itself only as a **blindly operating average**.

Moreover, if the price is independent and external to the producer, he can only change the volume of items produced. Therefore, the variations in demand and supply show the producer what amount of a given commodity he must produce to receive at least the cost of production in exchange. And as these variations are continually occurring, there is also a continual movement of withdrawal and application of capital in the different branches of industry.

The underlying principles of exchange were reciprocity, mutual benefit, and equality (equivalence). It was entirely consistent with the then understanding of social justice. However, in practice, the reverse is true.

The primary, fundamental category in Marx's economic writings is category "alienation" [Entäusserung] as movement and estrangement [Entfremdung] as a state. However, for most purposes, "alienation" and "estrangement" may be taken as synonymous. The exchange of products was the source of progressive alienation of man himself. On the one hand, we can indicate the civilised impact of trade activity and, on the other hand, on the devasting exchange effect on man, what Marx already described as the economic fall of man. Principles of exchange do not contradict social justice. In reality, there exists a principle to violate all principles of fair exchange. The reverse is truth — hypocrisy and attempted deception are valid principles of exchange. It applies even more to money. Marx regards history to the present as a process of degradation (economic fall of man, as he said) that has reached its nadir in capitalism and not as the progress of freedom, as Hegel argued. Enlarged exchange open the way to:

Commodification of products Commodification of man Commodification of services

Commodification of all social relationships.

In The Poverty of Philosophy, Marx gave a short resume of the development of trade. "Exchange has a history of its own. It has passed through different phases. [...] Finally, there came a time when everything that men had considered as inalienable became an object of exchange, of traffic and could be alienated. This is the time when the very things which till then had been communicated, but never exchanged; given, but never sold; acquired, but never bought — virtue, love, conviction, knowledge, conscience, etc. – when everything finally passed into commerce. It is the time of general corruption, of universal venality, or, to speak in terms of political economy, the time when everything, moral or physical, having become a marketable value, is brought to the market to be assessed at its truest value." [MECW, vol. 6, p. 113] It means further development of money as a means of payment] The key result of this development of money's function as means of payment was the negation of the principle of equivalence.

In *Contribution*, "[i]t is a characteristic feature of labour which posits exchange-value that it causes the social relations of individuals to

appear in the perverted form of a social relation between things. [MECW, vol. 29, p. 275]. And he continued, "[t]he relations of commodities as exchange-values are really the relations of people to the productive activities of one another." That money, "though a physical object with distinct properties, represents a social relation of production." [ibidem, 276]. In the last phrase, he repeated what he already wrote in *The Poverty of Philosophy*, "Money is not a thing, it is a social relation." [MEVW, vol. 6, p. 145]

Use-values serve directly as means of subsistence. But, on the other hand, these means of subsistence are themselves the products of social activity, the result of expended human energy, *objectified labour*. As for the objectification of social labour, all commodities are crystallisations of the same substance. Objectification do not posit commodification.

Man's **labour** becomes an external object \rightarrow commodity \rightarrow exchange value \rightarrow money \rightarrow capital. But alienation is not the necessary result of *externalisation* (objectification)—embodying in an outward form and *objectification* — the act of representing an abstraction as a physical thing. In our digital age, commodification is often criticised on the grounds that some things ought not to be treated as commodities — for example, water, education, data, information, and knowledge.

Many authors distinguish *commodification* as used in social contexts to mean that a non-commercial good has become commercial, typically with connotations of "corrupted by commerce". In contrast, *commoditisation* is used in business contexts to mean when the market for an existing product has become a commodity market, where products are interchangeable and heavy price competition.

Commodification can also be a source of objectification, comprehend as treating a person as an object or a thing. It is part of dehumanisation, the act of disavowing the humanity of others. We can find many aspects of so comprehended objectification in the works of Martha Nussbaum, Rae Langton, Catherine Mackinnon, Andrea Dworkin, Barbara Fredrickson, Tomi-Ann Roberts, and others.

Marx extensively analysed the social impact of commodification under the name *commod*-

ity fetishism and alienation. Alienation is a source of man's commodification. In the 1844 Manuscripts: that labour is external to the worker. His labour is therefore not voluntary, but coerced; it is forced labour. It is therefore not the satisfaction of a need; it is merely a means to satisfy needs external to it. The alienation of the worker in his product means not only that his labour becomes an object, an external existence, but that it exists outside him, independently, as something alien to him, and that it becomes a power on its own confronting him.

As Bertrand Ollman already noted the widespread misconception that Marx left the theory of alienation behind him in his later life, he bears most of the responsibility for the equally widespread misunderstanding of his term "labour." Grasping "labour" in *Capital* as alienated labour is the key to understanding Marx's economic theories. Therefore, the question is not how could Marx treat labour as an abstraction, but how could society do so. It is worth noting too that it is not in the *Manuscripts 1844* but in *Capital* that we find the fullest descriptions of the physical and mental aspects of the worker's alienation.

The alienated life is the greatest illusionist (magician). The forms of alienation differ for each class because their position and style of life differ. It seems that that from time immemorial, people were guided by the principle expressed by Alfred P Doolittle in the song "With a Little Bit of Luck":

The Lord above gave man an arm of iron So he could do his job and never shirk The Lord above gave man an arm of iron But, with a little bit of luck, with a little bit of luck

Someone else will do the blinkin' work (With a little bit, with a little bit) (With a little bit of luck you'll never work)

The End of History

All Marx's socioeconomic writings present the theory which views modern capitalist production as a mere passing stage in the economic history of humankind. Marx already wrote that the last phase of a world-historical form is its *comedy*. [MECW, vol. 3, p. 179] The same concerns economics.

History is the story of class struggle, human alienation, and ongoing systemic contradictions. Still, history will *inevitably* come to an end. Ultimately, the *negation* of the alienated capitalist order will yield the *synthesis* of a fundamentally new order. Socialism will put an end to history, an end to alienation, and finally unleash a "return of man to himself." "The very moment civilisation begins," wrote Marx, "production begins to be founded on the antagonism of orders, estates, classes, and finally on the antagonism of accumulated labour and immediate labour. No antagonism, no progress. This is the law that civilisation has followed up to our days." [MECW, vol. 6, p. 132]

Marx sarcastically remarked as concerns economists that the main thing about their horror of the falling rate of profit is the feeling that the capitalist mode of production meets in the development of its productive forces a barrier which has nothing to do with the production of wealth as such; and this peculiar barrier testifies to the limitations and the merely historical, transitory character of the capitalist mode of production; testifies that for the production of wealth, it is not an absolute mode, moreover, that at a certain stage it rather conflicts with its further development.

In Grundrisse, Marx gave one of the best generalisations of his investigation. "In the same measure as labour time — the simple quantity of labour — is posited by capital as the sole determinant of value, immediate labour and its quantity disappear as the determining principle of production, of the creation of use values. It is reduced both quantitatively, in that its proportion declines, and qualitatively, in that it, though still indispensable, becomes a subaltern moment in comparison to general scientific work, the technological application of the natural sciences, on the one hand, and also in comparison to the general productive power originating from the organisation of society in overall production, a productive power which appears as a natural gift of social labour (although it is an historical product). Thus, capital works to dissolve itself as the form which dominates production. [MECW, vol. 29, pp. 85–86]

In effect, Marx says, "This is how capitalism works, and this is the workings of an alienated society soon to be supplanted by communism."

Globetrotting of Congealed Clot of Labour

Analysing the metamorphosis of value, we see the guises assumed by value in its merry-goround journey through the economy include capital, commodity, money, profit, interest, rent, wages, and landed property. Beginning in 1843, value has been successfully traced by Marx from its origins in alienated labour through its various forms in the economy to their misrepresentations in the minds of men. The "Trinity Formula" in volume III of *Capital* provides a fitting conclusion to this work.

In the literature, you can find several ostensibly Marx's theories of value, exchange-value, money, capital, and, additionally, several theories of money. Here we have alienation theory of money, commodity theory of money, theory of commodity money, etc. It is clear that everyone wants to make their own contribution to Marxism. But why make of Marxism Augean stables?

Man's **labour** becomes an external object \rightarrow commodity \rightarrow exchange value \rightarrow money \rightarrow capital \rightarrow profit \rightarrow rent \rightarrow interest. You can see here the metamorphosis of **the same congealed clot of labour** globetrotting by the different forms. It takes the form of exchange value, then the form of money, then the form of capital, profit, interest...

Surface phenomena are revealed for what they are, forms of value, by demonstrating how value evolves into such forms, by tracing its metamorphosis. Marx states his attempt to chart the various forms taken by value in the process of circulation.

Twilight of Real Money

Who carefully read Capital ought to remember that Marx reduced the formula C-M-C to C-C. If we abstract from the pathological accumulation of money, formula C-C correctly reflects the purpose and meaning of the entire operation. Here money fulfils the only *evanescent* function of means of circulation. Since we are interested in getting an authentic product with good quality, we are still interested in getting real money. Our right and power to buy entirely depends on the authenticity of money received from the sale. But what is real money?

The aim of capital is therefore to **abolish** money in its traditional, immediate reality,

and to convert it into something which is posited, and likewise transcended, solely by capital, into something **purely notional**. [MECW, vol. 29, p. 61]

Authenticity Test

Does anybody find the state (governmental) fiat or other kinds of obligatory regulation determining gold as money? If gold exists before the emergence of any state or governmental authority, it is reasonable to assume that gold as money was used before the emergence of these entities.

The promise is not money. Can we consider gold as money as opposed to man's promise? Why so long time gold and silver, as a rule, were winners in the opposition against man? Social consensus or custom after gold and silver emergence as money does not mean that their emergence resulted from social consensus (contract *a la* Rousseau).

For capitalism of the first half of the XIX century, gold functioning as money was the heritage of two thousand years of exchange development. Thus, developed also means of authenticity test. There was a time when the best authenticity test was **biting the gold coin**. The rationale for biting a coin was the supposed widespread dissemination of gold-plated lead coins in the 19th century. Since lead is much softer than gold, biting the coins is a sensible test for counterfeiting. Along with this, **weighing** was also applied. Further, with the emergence of a paper substitute for money, the visible marks of the authenticity of paper money and 'lie detector' for paper 'money' emerged.

Despite the development of methods of checking money against counterfeiting and counterfeiting, the question remains. But what is money? What Marx answered:

Money is not a thing, but a definite form of value, hence, value is again presupposed. [MECW, vol. 37, p. 849]

Money — through a physical object with distinct properties, represents a social relation of production. [MECW, vol. 29, p. 276]

Money — the pure form of value [MECW, vol. 29, p. 26]

Money — an essential and necessary form of existence of the commodity which must manifest itself as exchange value, as general social labour. [MECW Vol. 32, p. 132]

Money — is an essential aspect of the commodity, and that in the process of metamorphosis, it is *independent* of the original form of the commodity.

Money — is itself the converted form of the commodity. [MECW, vol. 32, p. 307]

Money — abstract general social labour. [MECW, vol. 32, p. 139]

Money — the converted form of a commodity. [MECW, vol. 32, p. 291]

Money — the commodity in the form of exchange value. [MECW, vol. 32, p. 291]

Money — is merely a commodity form. [MECW, vol. 37, p. 850]

Money — the pure expression of value [MECW, vol. 37, p. 841].

The question of the emergence of money is not only interesting but also meaningful. However, Marx stressed that "When we speak of capital and its circulation, we are dealing with a stage of social development at which money is not introduced as a discovery, etc., but is a presupposition. To the extent that money in its immediate form itself possesses value, is not merely the value of other commodities, the symbol of their value — for if something immediate in itself is to be something else which is likewise immediate, it can only represent the latter thing, be, d'une manière ou d'une autre, a symbol — to the extent that money itself possesses value, is itself objectified labour in a particular use-value, it retards the circulation of capital, rather than accelerates it. [MECW, vol. 29, p. 60]

Socialisation of Labour

The socialisation of labour is one of the most significant tendencies discovered by Marx. It has its meaning for further development of labour relations. Marx was the first who comprehensively analysed economic and social aspects of mechanisation, automatisation, and, say, robotisation.

Today, humans' future is determined not only by how much money you have but also by what is the meaning of your life.

As it emerges in capitalist production, the commodity is different from the commodity taken as the element, the starting point of capitalist production. We are no longer faced with the individual commodity, the individual product. The individual commodity, the individual

product, manifests itself as a genuine product and as a commodity, as a part both really and conceptually of production as a whole. Each separate commodity represents a definite portion of capital and of the surplus value created by it.

Thus, the total value produced divided by the number of products determines the value of the individual product, and it becomes a commodity only as such an aliquot part. It is no longer the labour expended on the individual, particular commodity (in most cases, it can no longer be calculated, and may be greater in the case of one commodity than in that of another) but a proportional part of the total labour — the average of the total value [divided] by the number of products — determines the value of the individual product and establishes it as a commodity.

There is a vast volume of literature and researches concerning these tendencies commented above. We hope to find friends among them.

Conclusions

Today converted form of *commodity fetishism* is *digital fetishism*. The most fetishised item is bitcoin — the God of the virtual world.

The Political Economy of Communication

It seems that every society creates problems for itself, which have to be solved later with such difficulty. It is content what we called progress.

As Wikipedia informs us, the Political Economy of Communications, news, or media is a particular branch in Communication studies or media studies that study the power relations (political economy) that shape information communication from the mass media to its publics. This concept has been developed by media and political economy scholars such as; Dallas Walker Smythe, Herbert Schiller, Graham Murdock, Peter Golding, Vincent Mosco, Dan Schiller, and Robert W. McChesney. PEC analyses the power relations between the mass media system, information and communications technologies (ICTs) and the wider socioeconomic structure in which these operate, focusing on understanding the historical and current state of technological developments.

Today, the most well-known defender validity of Marx's writings is Christian Fuchs. He is

an Austrian sociologist, currently a professor at the University of Westminster, where he is the Director of the *Communication and Media Research Institute* (CAMRI). He is also known for being the editor of the open-access journal *tripleC: Communications, Capitalism & Critique*. Fuchs is also the co-founder of the *ICTs and Society-network*, a worldwide interdisciplinary network of researchers who study how society and digital media interact.

Especially for us are three of Fuchs' books: *Digital Labour and Karl Marx*, Reading Marx in the Information Age: A Media and Communication Studies Perspective on Capital Volume 1, *Rereading Marx in the Age of Digital Capitalism*.

As Christian Fuchs stressed, a contemporary reading of Marx needs to be mediated with contemporary capitalism's structures and the day's political issues. Media, communications, and the internet are essential issues for such a reading today. [Fuchs, 2017] He also stressed that there remains a need to read Marx from a media, communication and cultural studies perspective, which can help us better understand the dialectic of culture and the economy: Culture and economy are identical non-identical at the same time. All culture is produced in specific work processes.

COST (The European Cooperation in Science and Technology) is a funding organisation for creating research and innovation networks, called COST Actions. Launched in 2012 and funded by the COST Association, the **Dynam**ics of Virtual Work Action (http://dynamicsofvirtualwork.com) was an extensive international interdisciplinary research network on the transformation of work in the Internet Age. They worked in four groups Working Group 1 (New geographies and the new spatial division of virtual labour), Working Group 2 (Creativity, skills, knowledge and new occupational identities), Working Group 3 (Innovation and the emergence of new forms of value creation and new economic activities), Working Group 4 (Policy implications of Virtual Work).

These activities are reflected in a series of books under the collective title *Dynamics of Virtual Work*, edited by **Ursula Huws**, Professor of Labour and Globalization at the University of Hertfordshire, UK and **Rosalind Gill**, Professor of Cultural and Social Analysis at City

University, London, UK. This series, published by The Palgrave MacMillan, was developed under the auspices of COST Action IS 1202 and bring together leading international experts from a wide range of disciplines, including political economy, labour sociology, economic geography, communications studies, technology, gender studies, social psychology, organisation studies, industrial relations and development studies to explore the transformation of work and labour in the Internet Age, among others Christian Fuchs, Dominique Meda, Enda Brophy, Eran Fisher, Jorg Flecker, Juliet Webster, Keith Randle, Mathieu O'Neill, Olivier Fraysse, Pamela Meil, Patricia Vendramin, Rosalind Gill, Ursula Huws, Vassil Kirov.

The *Dynamics of Virtual Work Action* consisted of four working group.

Working Group 1 worked out the following questions. The combination of economic globalisation, computerisation and the spread of affordable telecommunications has introduced a new global division of labour in work involving the processing of digitised information. Virtual workers may be continents apart but still linked together through complex global value chains. This working group draws together a diverse range of international experts from such diverse fields as labour sociology, organisational theory, economics, technology studies and gender studies which have studied this phenomenon from different perspectives. Pooling this expertise will make it possible to examine the complex interrelationships between technological change, the restructuring of work processes, the changing gender division of labour, the restructuring of value chains and the spatial transformation of work.

Working Group 2 worked out the following questions. ICTs do not just transform the nature of existing jobs but also enable the development of entirely new ones. Sometimes work becomes more standardised and repetitive, but new forms of creative work also emerge. Alongside these dual processes of deskilling and reskilling come changes in the gender division of labour and changing patterns of work-life balance. Meanwhile, old occupational identities fade, and new ones appear, raising challenges for how workers can organise professionally or industrially and their class position. This Working Group

brings together experts from labour sociology, communications, media studies, gender studies and other fields to compare methodological approaches to researching these developments, develop theory, find common ground and identify topics requiring further investigation.

Working Group 3 worked out the following questions. The internet has placed the tools of cultural production into the hands of cultural consumers to an unprecedented extent. Through processes named 'co-creation', 'prosumption', and 'playbour', paid work had been transformed into unpaid work, and new forms of value-generating activity emerged. This Working Group brings together two very different fields of study to shed light on the processes by which new economic activities occur. The first concerns the blurring of the boundaries between 'work', 'consumption' and 'leisure'; the second concerns new forms of value creation. This Working Group brings together experts from the fields of political economy, communications studies, technology and economics to develop theoretical understandings of the porous borders between private creativity, leisure, creative work and entrepreneurship and explore methodologies for carrying out empirical research in this rapidly-changing field.

Working Group 4 worked out the following questions. The focus of Working Group 4 is on the implications of the development of virtual work for policy, especially employment policy. On the one hand, it will analyse the impact of existing policies and the reactions of differing policy stakeholders to the development of virtual work. On the other hand, it will engage proactively with policy stakeholders in the development of new policy agendas, such as those developed concerning the priorities of the EU's Europe 2020 goals and those of its 'Digital Agenda for Europe', including innovation policy, information society policy, skills policy, and economic development policy but with a special focus on employment policy, given the impacts on the quantity and quality of work. In addition to developing an overview of policy relating to virtual work in Europe, this Working Group will also draw on the results of the other three working groups to synthesise the messages from the Action as a whole for dissemination to the policy community.

Narrative economics

When in the fall of 2018, I first saw and listened to a lecture by Nobel Prize winner Robert Schiller, I did not yet know how Marx's conceptual approaches could be combined with Schiller's views. Then I had to edit his presentation as a magazine article. Some time later, I read his book *Narrative Economics. How Stories Go Viral & Drive Major Economic Events* [Shiller, 2019]. After that, I concluded that in both cases, the shared vision is how objective tendencies are born, sometimes turning into laws.

When Shiller was a nineteen-year-old undergraduate at the University of Michigan, he read a book written by Frederick Lewis Allen *Only* Yesterday: An Informal History of the 1920s. It was history about the run-up to the 1929 stock market crash and the beginnings of the Great Depression of the 1930s. After reading it, he came to believe that the book was extremely important, for it not only described the lively atmosphere and massive speculative booms of the Roaring Twenties. Shiller thinks that it also illuminated the causes of the Great Depression, the biggest economic crisis ever to hit the world economy, but I doubt he is right about that. It struck him that this period's history of rapidfire contagious narratives somehow contributed to the changing spirit of the times. Allen wrote: "These narratives sound a bit fanciful, but they were repeated so often that they were hard to ignore. It couldn't have been so easy to get rich, and the most intelligent people in the 1920s must have realised that. But the opposing narrative, which would have pointed out the folly of get-rich-quick schemes, was apparently not very contagious."

Further, Shiller wrote: "It seemed to me that the trajectory of the stock market and the economy, as well as the onset of the Great Depression, must have been tied to the stories, misperceptions, and broader narratives of the period. But economists never took Allen's book seriously, and the idea of narrative contagion never entered their mathematical models of the economy. Such contagion is the heart of narrative economics. [Shiller, 2019, epub p. 7]

The second connection of narrative economics concerns mass media and other means of mass communication, especially the internet.

We can rightfully call the internet a dual-use invention.

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At the same time, alternatives to the internet are being sought [Dulong de Rosnay & Musiani, 2020]. The authors stressed that for over twenty years, alternative forms of organising and networking — fuelled by the internet but sometimes pre-dating it — have been discussed as possible responses to the dynamics of concentration, centralisation and capture exemplified in the current pervasively digital world by the internet giants such as Google and Facebook. This article takes stock of the lessons learned by the authors in over a decade of research on decentralised/P2P network architectures and on information commons to suggest some 'ways forward' for these alternatives for the internet.

There are also significant issues concerning the financial aspects of the internet. The first is the emergence of so-called cryptocurrencies. We began discussing this theme some time ago [Ilinskii & Mierzwa], and soon, we will continue it. The second question concerns morally questionable incomes.

The third question in the context of narrative economics concerns technological progress that degrades job opportunities over much of the last two centuries by both professional economists and the general public. These concerns can be seen in narratives both in scholarly publications and in the news media. In his paper "Narratives About Technology-Induced Job Degradations Then and Now", Robert J. Shiller [Shiller, 2019] showed that part of the expressed concern about jobs has been about the potential for increased economic inequality. But another part of the concern has been about a perceived decline in job quality in terms of its effects on monotony vs creativity of work, individual sense of identity, power to act independently, and meaning of life.

Among the many recipes, I paid attention to Unconditional and Universal Basic Income concepts in the time of digitalisation of labour and Modern Monetary Theory (MMT). In the following issues of our journal, we will discuss these concepts.

Geopolitical Economy

Geopolitical Economy Research Group (GERG)—an influential policy research non-profit institute conducting high-quality research and analysis dealing with nations and their relation to the world economy. It will critically analyse and propose policy alternatives for managing the interaction of national economies and states to promote human development and mutual benefit in today's multipolar world. GERG is a part of the University of Manitoba.

The main aim of GERG is to support and disseminate new thinking on national and international political and economic issues. Today is increasingly urgent. The multipolar world that emerged after the financial crisis places a question-mark over established frameworks under which this thinking has proceeded in recent decades, notably globalisation in which markets unify the world order and empire in which a leading power unifies it. In such frameworks, either no state matters or only one state does. Multipolarity, in contrast, recognises a fissured world economy in which international economic governance is sharply contested, especially between the advanced industrial and emerging countries.

The VIP of GERG are:

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Colin Gillespie. He is a physicist, lawyer, strategic analyst, and writer; formerly a research scientist with Atomic Energy of Canada Limited, managing partner of Taylor McCaffrey LLP and adjunct professor of law at the University of Manitoba.

Henry Heller. He is a professor of history at the University of Manitoba. He is the author recently of A Marxist History of Capitalism (Routledge: 2018) and The Capitalist University: The Transformations of Higher Education in the United States Since 1945 (Pluto Press, 2016).

In International Advisory Committee, we find Abigail Bakan, Jayati Ghosh, Kees van der Pijl, Seong Jing Jeong, Boris Kagarlitsky, Alicia Puyana, Diana Tussie.

The main work of GERG collaborators is a twovolume publication, "Analytical Gains of Geopolitical Economy". This work advances geopolitical economy as a new approach to understanding the evolution of the capitalist world order and its 21st-century form of multipolarity. Neither can be explained by recently dominant approaches such as US hegemony or globalisation: they treat the world economy as a seamless whole in which either no state matters or only one does. Today's BRICs and emerging economies are only the latest instances of state-led or combined development. Such development has a long history of repeatedly challenging the unevenness of capitalism and the international division of labour it created. This dialectic of uneven and combined development, not markets or imperialism, has spread productive capacity around the world. It also ensured that the hegemony of the UK would end, and attempts to create that of the US would peter out into multipolarity. Part two of this book paves the way, advancing Geopolitical Economy as a new approach to the study of international relations and international political economy.

One of GERG's member is the research group "Small States in the Multi-polar World". It was

founded and held its initial meeting, at the University of Manitoba, Winnipeg, on 28 September 2015. Professor Radhika Desai and Assistant Professor Petar Kurecic founded the Group as a part of the GERG project. The topics that were discussed as the possible future research agendas were the following:

- 1) Studying small states using the geopolitical economy as the discipline of multipolarity
- 2) Various groups of small states studied through regional research
- 3) Small states and alliances bandwagoning, balancing, integrating etc.
- 4) Small states that originated from the breakup of larger entities
- 5) Small unrecognised entities, i.e., pseudostates, residual consequences of the breakup of large entities
- 6) The cooperation between small states through cooperation groups
- 7) Imperial outposts (dependencies without full sovereignty)
- 8) Benefits of integration for small states in economic terms.

However, the Group is open to all topics devoted to the problematics of small states/small economies in the multipolar world. It strongly encourages studying the research mentioned above interests using the geopolitical economy as the discipline of multipolarity.

These issues we will also supplement with the theme of creative industries, the most dynamically developing entities.

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Камера-обскура или то, как выглядят вещи: Некоторые замечания об экономических сочинениях Маркса

Збигнев Межва

RNJATOHHA

В статье рассматриваются основы марксистской теории, дается ее оценка для возможности применения при изучении текущих экономических событий. Критически оцениваются интерпретации работ Маркса современными экономистами. Делается вывод, что большая часть современной экономической теории не верна с точки зрения собственного метода Маркса и не подходит для понимания современного капитализма. Рассматриваются темы, являющиеся предметом современных дискуссий и занимающие центральное место в экономических трудах самого Маркса. Представлены основные тенденции развития капитализма, открытые Марксом. Среди них: пределы значения стоимости (= времени) как единственного критерия экономической целесообразности; постоянное воспроизводство нехватки рабочих мест при изобилии товаров; расширение материальных коммерческих отношений на другие сферы общественной жизни; развитие денежных отношений — появление производных денег, эрзац-денег, цифровых денег. В заключение статьи автор приходит к выводу, что некоторые общества постепенно теряют ценностные и нравственные ориентиры, угрожая тем самим развитию и даже существованию других обществ или наролов.

Ключевые слова: Карл Маркс; стоимость; теория стоимости; закон стоимости; теория денег

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