# Editorial Board

**Global Journal of Management and Business Research**

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Corruption, Financial Development and Economic Growth: Case BRICS Countries

By Foued Sabbagh

Abstract- This article has the objective to provide a theoretical framework empirical or by a brief literature linking in particular the impact of corruption on economic growth, or the impact of financial development on economic growth, or the overall impact of corruption and of financial development on economic growth. Some studies have shown a positive relationship or negative between these causal relation relations and interaction. This study is estimated on the basis of the annual data relating to five countries BRICS, observed during the period from 2000 to 2012, and using the method of least ordinary square (OLS) of panel dynamic. The results of the estimation show that there is a significant relationship positive or negative between corruption, the financial development and economic growth. This relationship and more and more intense for the role of the institutional framework and the financial system of the BRICS countries.

Keywords: corruption, financial development, economic growth, BRICS countries, panel data dynamic, method of least ordinary square (OLS).

GJMBR-C Classification: JEL Code: O40

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Résumé- Cet article a pour objectif de fournir un cadre théorique et empirique par une brève littérature reliant en particulier l’impact de la corruption sur la croissance économique, ou l’impact du développement financier sur la croissance économique, ou globalement l’impact de la corruption et du développement financier sur la croissance économique. Certaines études ont montré une relation positive ou négative entre ces relations de causalité et d’interaction. Cette étude est estimée sur la base des données annuelles relatives à cinq pays BRICS, observés durant la période de 2000 à 2012, et en utilisant la méthode des Moindres Carrées Ordinaires (MCO) de panel dynamique. Les résultats d’estimation montrent qu’il existe une relation significative positive ou négative entre la corruption, le développement financier et la croissance économique. Cette relation et de plus en plus intense pour le rôle du cadre institutionnel et du système financier des pays BRICS.

Mots-Clés: corruption, développement financier, croissance économique, pays BRICS, données de panel dynamiques, méthode des moindres carrées ordinaires (MCO).

Abstract- This article has the objective to provide a theoretical framework empirical or by a brief literature linking in particular the impact of corruption on economic growth, or the impact of financial development on economic growth, or the overall impact of corruption and of financial development on economic growth. Some studies have shown a positive relationship or negative between these causal relations and interaction. This study is estimated on the basis of the annual data relating to five countries BRICS, observed during the period from 2000 to 2012, and using the method of least ordinary square (OLS) of panel dynamic. The results of the estimation show that there is a significant relationship positive or negative between corruption, the financial development and economic growth. This relationship and more and more intense for the role of the institutional framework and the financial system of the BRICS countries.

Keywords: corruption, financial development, economic growth, BRICS countries, panel data dynamic, method of least ordinary square (OLS).

1 Le groupe de pays communément appelé BRICS est composé de cinq pays (le Brésil, la Russie, l’Inde, la Chine et l’Afrique du Sud) qui sont considérés comme une zone de coopération et d’intégration économique, commerciale et politique dans le monde. Ils constituent un nouvel pôle économique émergent à l’échelle internationale.


L’objectif de cet article est de faire une brève revue de la littérature théorique et empirique. En outre, de tester si l’impact du développement financier sur la croissance économique est conditionné par l’existence du niveau de corruption. En d’autres termes, lorsqu’un environnement économique a connu une bonne situation de la gouvernance, un manque de la corruption et un système financier et bancaire favorable alors que le niveau de la croissance économique sera plus élevé. À l’inverse, lorsque le niveau de la corruption sera élevé alors que le degré du développement financier et la croissance économique sera plus faible.

On cherche par conséquent la relation de causalité et d’interaction entre la corruption, le développement financier et la croissance économique. Pour répondre à la problématique suivante, quel est l’impact de la corruption sur le développement financier et sur la croissance économique ? Et quelle est la relation de causalité entre la corruption, le développement financier et la croissance économique dans les pays des BRICS.Cette étude s’organise de la manière suivante. La première partie présente une brève revue de la littérature théorique et empirique pour déterminer l’interaction entre la corruption, le développement financier et la croissance économique. La deuxième partie sera consacrée à l’analyse empirique de ce débat dans les pays des BRICS.

II. Une Revue De La Littérature


a) L’impact de la corruption sur la croissance économique


b) L’impact du développement financier sur la croissance économique

La relation de complémentarité entre le développement financier et la croissance économique a


Dans le même contexte, l’idée générale de l’étude théorique de Nelson R.R et Phelps E.S (1966),

2 La qualité institutionnelle est définie par les indices de la stabilité politique et de la bureaucratie (Ahmad E, Aman Ullah M, Irfanullah Arfeen M (2012)).

c) L’interaction entre la corruption, le développement financier et la croissance économique

Face à ce débat, plusieurs littératures empiriques ou théoriques traitent la relation entre la corruption, le développement financier et la croissance on note en particulier les travaux de (Ahlin C et Pang J (2008) et Haydaroglu C (2016)). D’autres travaux se concentrent sur les déterminants de la croissance économique qui permet d’expliquer les origines de la croissance économique et les effets de certaines variables sur les taux de croissance réels par habitant, parmi ces travaux on note les études empiriques de (Sabbagh F (2017), Chen B et Feng Y (2000) et Goel R.K., Korhonen I (2011)). La faible corruption et le développement financier tant de faciliter la réalisation de projets productifs, mais agir comme substituts pour ce faire (Ahlin C et Pang J (2008)). En effet, la substituabilité de cette interaction confirme que le développement financier et le faible ou la lutte contre la corruption semblent avoir respectivement des effets positifs sur la croissance économique. Dans le même sens, l’analyse de Haydaroglu C (2016), étudie l’interaction entre la liberté économique, les investissements étrangers directs et la croissance économique. Cette idée se pose sur la relation entre la lutte contre la corruption, la pauvreté, la performance économique et la capacité d’attirer des investissements directs étrangers. En résumé, malgré le rôle important du développement financier comme un moteur de la croissance économique, il y a des effets défavorables sur les succès de cette relation à travers le rôle de la corruption comme un facteur d’instabilité. La transition vers la démocratie, la bonne gouvernance et la qualité institutionnelle sont des facteurs clés du processus de la croissance économique. Les effets favorables pour avoir une amélioration des taux de croissance sont donc d’avoir un meilleur climat du développement financier et d’assurer des mécanismes pour la lutte contre la corruption.

Dans les travaux empiriques sur les déterminants de la croissance économique, on note l’étude récente de Sabbagh F (2017), qui permet d’expliquer les facteurs de croissance économique comme des déterminants de croissance exogène selon la population active et la production par tête due au progrès technique et de croissance endogène selon l’accumulation du capital humain, physique, social et technologique. Cette étude empirique démontre que le PIB par habitant en %, la durée de la scolarité obligatoire, le taux de natalité, le taux d’inflation, la formation brute de capital en % du PIB, l’investissement brut en % du PIB, la croissance de la population active, moyenne annuelle, la liberté économique, le dépense de consommation finale des administrateurs en % du PIB, l’ouverture de l’économie des pays BRICS, l’indice du respect de la loi et l’indice de la démocratie est des déterminants importants de la croissance économique dans les pays BRICS. Ces indicateurs sont des déterminants explicatifs des facteurs de la croissance économique avec les relations des aspects de développement économique et financier et les normes des mesures de la corruption par l’indice du respect de la loi et l’indice de la démocratie. L’étude empirique de Chen B et Feng Y (2000), démontre que les initiatives privées et semi-privées, l’enseignement supérieur et le commerce international amènent toutes à une augmentation dans la croissance économique de la Chine. D’autres variables telles qu’un taux de fécondité élevé, une inflation élevée et la présence des entreprises d’État (SOE) permet de réduire les taux de croissance parmi les provinces. Par ailleurs, la croissance...
III. Méthodologie et Base de Données

L'objectif principal de cet article est d'analyser et de vérifier selon une estimation empirique l'interaction entre la corruption, le développement financier et la croissance économique dans les pays des BRICS. La méthodologie provisoire choisie dans cette partie pour la validation empirique se compose de trois sections successives et complémentaires de la revue de littérature théorique et empirique. D'abord, dans la première section de cette étude, je présente la base de l'étude sur la relation entre la corruption, le développement financier et la croissance économique. Cependant, l'indice de la démocratie, l'indice du respect de la loi et l'indice de l'ouverture financière auront un impact positif ou négatif sur le degré de développement financier par conséquent entraîneront des effets directs sur les taux de la croissance économique.

a) Base de données

La base de données utilisée dans cet article est retirée en données annuelles fournies dans (annexe 1). Cette étude se concentre sur le taux de croissance de PIB réel par habitant comme une variable dépendante et un ensemble des variables indépendantes des données de panel couvrant la période de 2000 à 2012. Les données relatives à la corruption, le développement financier et la croissance économique d'un groupe des cinq pays des BRICS ont été établis dans cette partie empirique pour but de valider la partie précédente de revue de la littérature. La base de données s’applique en particulier à ces cinq pays émergents des BRICS qui constituent un débat actuel et ouvrent l’horizon d’une profonde analyse empirique.

b) Modèle

Le modèle économétrique de base choisi dans cet article est développé d’après les travaux empiriques de (Chen B et Feng Y (2000), Goel R.K., Korhonen I (2011) et Sabbagh F (2017)). Sur la base de ce modèle et de ma discussion sur la relation entre la corruption, le développement financier et la croissance économique des pays BRICS. J’ai choisi le modèle statistique multivarié de base et les variables explicatives suivantes :

\[ \text{GDP}_i = \beta_0 + \beta_1 (VA)_{it} + \beta_2 (PV)_{it} + \beta_3 (GE)_{it} + \beta_4 (RO)_{it} + \beta_5 (RL)_{it} + \beta_6 (CC)_{it} + \beta_7 (INDS_P)_{it} + \beta_8 (GDS)_{it} + \beta_9 (OPNS)_{it} + \beta_{10} (INV)_{it} + \beta_{11} (INF)_{it} + \beta_{12} (EDU)_{it} + \beta_{13} (FCPH)_{it} + \beta_{14} (GOV)_{it} + \epsilon_{it} \]

Où l’indice i désigne les pays BRICS (le Brésil, la Russie, l’Inde, la Chine, l’Afrique du Sud), t désigne le temps annuel de 2000 à 2012. GDP désigne le taux de croissance de PIB réel par habitant, et la définition des autres variables explicatives désigne les variables institutionnelles par les indices de la corruption tels que les voix et la responsabilisation démocratique, la stabilité politique et l’absence de violence, l’efficacité du gouvernement, l’État de droit et le contrôle de la corruption. Ces définitions déterminent le rôle de la lutte contre la corruption pour avoir une bonne gouvernance institutionnelle dans une société démocratique. De plus, le développement financier mesure le rôle primordial des marchés financiers, des banques, de l'ouverture commerciale et de l'investissement dans le processus de la croissance économique des pays BRICS. Pour les indicateurs de la croissance économique on note le taux d'inflation, la durée de la scolarité obligatoire, la formation brute de capital fixe en % du PIB, la dépense de consommation finale des administrations publiques (en % du PIB), désigne la part moyenne des dépenses publiques en % PIB. Le test d’estimation par la méthode de moindres carrés ordinaires (MCO) à partir de l’utilisation de logiciel EIVIEWS 5. Ensuite, dans la deuxième section, je développe le modèle économétrique avec des variables sélectionnés sur l’application du thème de la relation entre la corruption, le développement financier et la croissance économique. Enfin, dans la troisième section, je discute les résultats d’estimation provisoires attendus.

c) Résultats et discussions empiriques

Les résultats d’estimation présentent les taux de croissance économiques comme déterminants de
l’interaction entre la corruption, le développement financier et la croissance économique dans les pays BRICS. Ils examinent en particulier les variables explicatives de modèle de base qui sont étendues pour répondre au thème de cette étude. Le tableau dans (annexe 2), présente la matrice des coefficients de corrélation pour les différentes variables estimées. Ces variables sont vérifiées empiriquement dans la note du fort ou du faible degré de corrélation. On constate notamment qu’il y a une forte corrélation entre l’épargne intérieure brute en (% du PIB) et l’investissement intérieur brut en % du PIB est égal à 0.875023, entre l’épargne intérieure brute en (% du PIB) et la formation brute de capital fixe en % du PIB est égale à 0.863314, ainsi entre l’investissement intérieur brute (% du PIB) et la formation brute de capital fixe en % du PIB est égale à 0.989571. En revanche, on note qu’il y a une plus faible corrélation entre le taux de croissance de PIB réel par habitant et l’indice boursier S&P (% de variation annuelle) est égal à – 0.012289. Le tableau de matrice des coefficients de corrélation indique en particulier les liens entre les différentes variables sélectionnées par le degré du fort ou de la faible corrélation.

Cependant, après les résultats de la régression par la méthode des moindres carrés ordinaires (MCO), le niveau des risques d’erreur est mesuré respectivement à un taux de 1%, 5% et 10% à la fin dans un test d’estimation statistique (annexe 3). Par ailleurs, l’hétéroscédasticité pouvait être importante dans l’ensemble des variables explicatives des pays BRICS. On remarque qu’il y a neuf coefficients prennent les signes négatifs, tandis que cinq coefficients prennent les signes positifs. Tous ces résultats estimés sont conformes à l’étude théorique pour valider l’interaction entre la corruption, le développement financier et la croissance économique des pays BRICS.

La variable dépendante PIB : C’est le taux de croissance du PIB réel par tête et la mesure la plus utilisée des travaux empiriques, comme une variable expliquée.

La corruption : il s’agit d’un ensemble des variables institutionnelles, on note les variables explicatives suivantes comme des déterminants de l’indice de la corruption tels que les voix et la responsabilisation, la stabilité politique et l’absence de violence, l’efficacité du gouvernement, la qualité réglementaire, l’Etat de droit et le contrôle de la corruption. L’ensemble des variables institutionnelles indique le degré de la corruption dans les pays des BRICS, est introduit par quatre variables ont des signes négatifs et accroissent significativement et deux variables ont des signes positifs et aussi significatives à 1%, et la valeur absolue du t-student corrigé de l’hétéroscédasticité. La significativité de ces variables indique la qualité institutionnelle, le système de réglementation, les méthodes de la gouvernance et la direction de la lutte contre la corruption. Les variables institutionnelles de l’ICRG2 ont un impact direct sur le niveau d’évaluation ou de perturbation des taux de croissance dans les pays BRICS.

Le développement financier : Les résultats de la régression des indicateurs de développement financier sont l’indice boursier S&P (% de variation annuelle) qui permet de mesurer les fluctuations des taux de change sur les marchés financiers, l’épargne intérieure brute (% PIB) qui permet de mesurer la santé de secteur financier et bancaire, le taux d’ouverture est un indicateur des relations commerciales sur l’extérieur et l’investissement intérieur brut en % du PIB est un indicateur des flux des capitaux et du développement de l’infrastructure. On remarque d’après le tableau d’estimation qu’il y a des variables explicatives qui sont significatives et positive alors que d’autres ne le sont pas, on note en particulier le coefficient négatif et non significatif de l’indice boursier S&P (% de variation annuelle) est égal à – 0.212%. Ce coefficient est corrélé négativement et d’une manière non significative sur le taux de croissance de PIB réel par habitant. En outre, la significativité des variables explicatives en particulier de taux d’ouverture mesuré par le total des exportations et des importations rapportées au PIB et l’investissement intérieur brut en % du PIB a un effet positif sur la croissance économique. Le climat favorable de l’investissement attire les investisseurs et accroît les transactions commerciales et favorise les exportations et les importations entre les pays, et, par conséquent, améliore le niveau général du développement financier. De plus, l’épargne intérieure brute (% du PIB) renforce les secteurs financiers et bancaires et par la suite améliore le taux de crédit bancaire, l’entrepreneuriat et l’investissement. En effet, le développement financier a un effet positif et significatif selon les coefficients GDS, OPNS et INV respectivement par le taux 1%, 5% et 10%.

La croissance économique : On constate que toutes les variables explicatives sont corréllées négativement et significative par un fort coefficient. On note le taux d’inflation, la durée de la scolarité obligatoire, la formation brute de capital en % du PIB et la dépense de consommation finale des administrations publiques en % du PIB. L’indicateur des niveaux de l’éducation et de la dépense publique indique par la forte significativité de coefficient estimé respectivement – 0.456185 et – 0.338041, qu’il y a une relation étroite entre ces deux variables explicatives avec le taux de croissance du PIB réel par habitant dans les pays BRICS. De plus, une inflation plus tolérée et une augmentation dans le niveau de capital physique était susceptible d’augmenter le taux de croissance.

3 Le Guide International du Risque Pays Comprend un indice de risque politique, qui à son tour se compose de 12 éléments de mesure différentes dimensions de l’environnement politique et économique face à des entreprises opérant dans un pays. L’ICRG utilise des données à partir des rapports de décembre de chaque année.
L’observation de l’ensemble des graphiques scatters 1 (annexe 4) représente la relation partielle de la variable dépendante, le taux de croissance du PIB réel par habitant par rapport à l’ensemble des variables explicatives indépendantes de la corruption, le développement financier et la croissance économique. Chaque observation correspond au taux moyen de la significativité de la relation du taux de croissance du PIB réel par habitant par rapport aux variables explicatives.

Les points des graphiques scatters mesurent le signe positif ou négatif, faible ou fort par la hausse ou la baisse entre deux variables. L’ensemble de ces graphiques scatters illustre des variables explicatives indépendantes sur l’axe vertical par rapport à la variable expliquée dépendante sur l’axe horizontal. Ces mobilités et ces placements des différents points sur les graphiques scatters sont définis comme des déterminants de niveau de la relation de causalité et de l’interaction entre la corruption, le développement financier et la croissance économique des pays BRICS.

IV. Conclusion


Cette littérature ayant pour base des estimations pour valider l’interaction entre la corruption, le développement financier et la croissance économique dans les pays BRICS. Dans la majorité des travaux de littérature d’ordre théorique ou empirique, il existe une forte relation substituable ou complémentaire, d’une part entre la corruption et la croissance économique et de l’autre part entre le développement financier et la croissance économique. Rares sont les travaux qui ont tenté de relier la corruption, le développement financier et la croissance économique simultanément. Sur cette relation de causalité traitée dans cet article, j’ai montré à travers une brève littérature existante qu’un bon fonctionnement des systèmes financiers et bancaires présuppose un cadre institutionnel efficace et rentable par un niveau de corruption faible, un système judiciaire plus efficace, une stabilité politique dans un Etat de droit, un rôle important des lois, un système démocratique efficace, et une meilleure bureaucratie. En effet, la bonne qualité institutionnelle et la réglementation gouvernementale se présentent, ces dernières années dans les pays BRICS, comme un déterminant important de l’intermédiation financière et par conséquent sur le système du développement financier. J’ai montré, ainsi que les éléments de la lutte contre la corruption offrent un environnement favorable au développement financier et par suite à la croissance économique.

Dans cette étude, on a tenté de détecter le rôle joué par la qualité institutionnelle pour la lutte contre la corruption et dans l’influence du développement financier et la croissance économique pour un échantillon de cinq pays BRICS. Dans ce cadre, un large éventail de variables explicatives a été trouvé en corrélation avec le taux de croissance du PIB réel par habitant. Les résultats empiriques de la régression de l’équation basée sur une approche en données de panel dynamiques montrent que l’impact de la corruption et du développement financier sur la croissance économique semble positivement ou négativement significative. Ainsi, il existe une corrélation significative entre le taux de croissance du PIB réel par habitant par rapport à l’ensemble des variables institutionnelles, du développement financier et de la croissance économique. En effet, les résultats d’estimation par la méthode de moindres carrés ordinaires (MCO) suggèrent que l’impact du développement financier sur la croissance économique est fortement lié par un certain niveau de qualité institutionnel à travers les processus de la lutte contre la corruption. En d’autres termes, les résultats empiriques montrent une relation significative et étroite entre le cadre institutionnel, le développement du secteur financier et la croissance économique dans les pays BRICS. Ce qui suggère que dans un cadre institutionnel sain et favorable basé sur la responsabilisation démocratique, la stabilité politique, l’efficacité du gouvernement, la qualité réglementaire, l’Etat de droit et le contrôle de la corruption on peut avoir donc un environnement favorable du développement du secteur financier dans ces économies et par la suite un facteur clé pour avoir un taux de croissance économique plus élevé.

Références Bibliographiques


30. Egoh J.C., Villieu P. (2013), « Un réexamen de la non-Linéarité entre le développement financier et la
63. The BRICS Report. (2012), « A Study of Brazil, Russia, India, China and South Africa with special focus on synergies and complementarities », *Oxford University Press*.

**ANNEXES**

**Annexe 1:** Les définitions des variables et les sources des données

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<th>Variables</th>
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<th>Sources</th>
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<td>Guide International du Risque Pays (ICRG)</td>
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<td>PV</td>
<td>La stabilité politique et absence de violence, c’est un indicateur agrégé qui comprend : la stabilité gouvernementale, les conflits internes et externes, et les tensions ethniques.</td>
<td>Guide International du Risque Pays (ICRG)</td>
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<td>GE</td>
<td>L’efficacité du gouvernement est la mesure de la qualité de la bureaucratie, les points sont attribués, lorsque la bureaucratie est indépendante de la pression politique. Le score maximum est de 4 points.</td>
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<td>La qualité réglementaire mesure le profil d’investissement. Cet indice contient trois composantes : la viabilité des contrats/ le degré d’exportation, le rapatriement des profits et les délais de paiement. Un score de 4 (0) points correspond à un risque très faible (élevé).</td>
<td>Guide International du Risque Pays (ICRG)</td>
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<td>L’État de droit est une mesure des ordres et des lois. La règle de droit comprend deux composantes : une évaluation de la puissance et de l’impartialité des systèmes judiciaires et légaux et une évaluation du respect de la loi. Un faible score indique une plus grande fragilité réglementaire.</td>
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<td>Le contrôle de la corruption, les notes sont attribuées suivant la corruption financière sur les licences d’exportation ou d’importation, les contrôles de change, taxe etc……, des valeurs élevées (faibles) de cet indice indiquent une corruption faible (élevée).</td>
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### Annexe 2: Matrice des coefficients de corrélation

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Included observations: 65

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<td>Durbin-Watson stat</td>
<td>1.973021</td>
<td>Prob(F-statistic)</td>
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Annexe 4: Graphiques Scatter de la relation de variable dépendante par rapport à toutes les autres variables indépendantes
Arabization and Globalization Reality and the Challenges of the Twenty-First Century

By Dr. Harbi Arikat & Dr. Abdul Aziz Saymeh

Abstract- The Importance of Arabization would lead to economic integration between Arab countries especially in present circumstances which should be increasing because of many benefits that can be gained from integration. Global Giant integration blocs appear long time such as European Economic union which are now (25) countries. On the other hand, collective self – dependence on the part of the Arab countries will have positive efforts regarding decision making in all fields, globally and locally in order to gain benefits from regional economic integration.

Different accelerating conditions and developments had negative impact on the individual Arab economies via facing giant blocs. Economic integration and self – dependence among Arab Countries would lessen the gap with global economic blocs and face the negative influence of globalizations and other challenges.

GJMBR-C Classification: JEL Code: F60

Strictly as per the compliance and regulations of:
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Different accelerating conditions and developments had negative impact on the individual Arab economies via facing giant blocs. Economic integration and self – dependence among Arab Countries would lessen the gap with global economic blocs and face the negative influence of globalizations and other challenges.

The current reality of the twenty-first century indicates the importance of cooperation and complementarity in building the economies of countries. It is difficult for a single country to achieve rapid economic growth and social development in the era of advanced technology and the requisite ownership and use of human skills, financial resources, various primary resources and large markets for the disposal of products. Self-potentials alone cannot advance countries without a regional bloc based on clear foundations and genuine political will that is serious and sincere.

II. The Importance of the Study

The impetus for the establishment of economic blocs among countries is to improve the position of the countries concerned in the international division of labor by taking advantage of the advantages and benefits of the regional economic bloc among countries such as economies of scale, the size of the market, increase investment opportunities and reduce unemployment through the recruitment process and increase the ability to compete and solve many problems. As for Arab economic integration, it is now in its most severe crisis, despite the obvious advantages and mutual benefits of all parties. Moreover, the integration of the Arab countries can restore productive structure and optimal specialization in the Arab economies to reduce the gap with the large global economic blocs. This can be achieved only if the political will of the Arab political system is sincere and serious. It is necessary to take serious economic and political steps through turning the slogans into actions and wills to movements to establish an Arab economic and political bloc capable of facing the challenges and dealing with them in a world where only the strong remain.

III. Objectives of the Study

There are a number of important objectives to study as follows:
First: To identify the experience of Arab economic integration and the most important international experiences to benefit from them and to tackle the most important encountered obstacles facing the Arab economic integration process.
Second: Point out the most important challenges facing Arab countries, especially in the 21st century.
Thirdly: To forecast the prospects for a United Arab country that is strong economically, socially, politically and even militarily to face all challenges.

IV. METHODOLOGY OF THE STUDY

The researchers relied on descriptive and analytical scientific methodology of the experience of Arab economic integration since the establishment of the Arab League in 1945 and other international experiences, challenges and prospects for building a strong Arab economy, based on Arab and foreign available sources.

Study plan:
This study includes the following chapters
Chapter One: deals with economic integration: its concept and its benefits.
Chapter Two: deals with the experience of Arab economic integration and other global experiences.
Chapter Three: Arabs and Challenges.
Chapter Four: Conclusion and Recommendations. And a list of margins and references.

V. ECONOMIC INTEGRATION: ITS CONCEPT AND BENEFITS

a) The concept of economic bloc

The economic bloc refers to the integration of a group of economies into countries with certain characteristics within the framework of a reciprocal relationship based on voluntary coordination of the organization and unification of their economic policies with a view to achieving mutual benefit through a series of preferential relations. Arabization will lead to economic integration if there is sincere political will which leads to the achievement of many benefits.

b) Economic blocs

The parties of the economic bloc can follow a set of mechanisms called forms or degrees of economic pillars required to achieve their goals. Bela Balassa, had defined economic integration and distinguished between economic integration as a process, while integration as a fact is a process that includes all measures that put an end to all the reasons for discrimination between the economic units of the economic bloc. As a reality, it represents a situation in which there is no distinction between the different economies of the bloc. Bella Balassa presented his model of integration in five gradual stages: (2)

i. Free trade zone

In which the restrictions and quantity between the participating countries are eliminated, but each of them maintains its tariff policy towards any non-member countries.

ii. Customs Union

This includes the abolition by member states of all customs duties and all quantitative restrictions on goods as well as the harmonization of customs tariffs with the outside world countries.

iii. The Common Market

This format addresses the elimination of all tariffs, quantitative restrictions and the unification of customs tariffs against the outside world countries, the liberalization of the movement of elements of production (labor and capital) within the market.

iv. Economic Union

This step is more developed degree than the common market as it has the same characteristics of the common market in the liberalization of the movement of goods, services and production elements as well as the coordination of economic policies among member states, such as fiscal, monetary, agricultural or industrial policy.

v. Economic Integration or Economic Fusion

This is one of the highest degrees of integration where countries become one economy to determine their own policies.

It should be noted that some of the economic blocs gradually passed these stages until it reached the fourth form of economic bloc, namely the European Union, however, the Arab countries have to gradually begin to follow the form of integration until they reach the final form, such as the European Union. Arab countries had started their common market in 1964 as one step, but not Gradually like the European Union.

c) The benefits of economic integration

There are important benefits that can be summarized for the economic integration of any group of countries. These benefits will be realized instantly, but they need a longer time period that might be an era.

The benefits of economic integration are numerous and indeed have been achieved by groups of countries that have taken economic integration such as the European Union. These benefits have been identified by many economic thinkers and others, and these benefits can be enumerated below.(3)

a. Economic integration creates a wider market for products due to the multiplicity of markets and increasing the number of consumers in front of these products within the countries of the group. Trade and exchange of products are a good entry point for starting to integrate as agricultural or industrial goods, which have only the markets of the producing country, have wider distribution routes in the markets of other countries of the group. The effects of economic integration will lead to increased production of required species, which might be gaining new markets, activating agriculture and industrial productions. Factories are expanding...
in size and production varies, and intermediate businesses such as marketing, distribution, transport, insurance and others are expanding.

b. Economic integration creates a broad and common market for labor. The labor force of all types and levels can find better and more opportunities to invest its energies, which will lead to improved income and living standards. It will also provide greater opportunities for producers and businessmen to obtain the necessary employment, experiences and specialties at ease.

c. Economic integration offers greater opportunities for capital investors and their expected returns without restriction and exploitation of economic potentials. This leads to a greater return for capital-exporting countries as well as the production and operation of factors in host countries of invested capital. The effects are also reflected in increased production, incomes and living standards within the group countries. Demand is increasing with increasing incomes and the economy shall be booming in all bloc member countries.

d. As one of the most important benefits of economic integration is that it allows member states to establish large joint projects which may be difficult for the individual State as those projects require huge amounts of financing and high level of expertise as well as broad markets. To benefit from making such projects the should be run with the best economic fundamentals, operational, and productive principles.

e. Economic integration puts the Member States in a higher status in the international market and towards other economic blocs, especially if these member states have the resources and the necessary products and strategy. Economic integration will locate member states in better conditions for foreign trade. Member states can achieve many benefits from economic and technical agreements with other States, as well as they gain political weight.

f. Economic integration leads to specialization among the countries that organize integration to benefit from the comparative advantages enjoyed by some of the countries of the group and thereby increase and improve production within each country and diversify among them.

These are the most important benefits and advantages that can be gained by countries wishing to build economic blocs.

VI. EXPERIENCE OF ARAB ECONOMIC INTEGRATION AND OTHER GLOBAL EXPERIENCES

a) Arab Experience

The call for the regional bloc among countries is expanding and increasing its importance as an objective of the proper absorption of the requirements of development in this age and to meet all challenges.

The world of the twentieth century and the twenty-first century is a world of giant economic blocs. The question is why the Arab economic bloc is not on the list of these giant economic blocs. Arabs attempt to form an Arab economic bloc are among the oldest international attempts in this regard.(4)

The date of the start of the process of Arab economic integration was the date of the establishment of the Arab League on 23 March 1945, which represented the creation of technical economic institutions to establish the bases of economic cooperation between the Arab countries.

In 1950, the Joint Arab Defense Treaty was signed and the Economic Council was established. In 1957, the Council of Economic Unity Agreement was signed, which came into force only on April 30, 1964. Also in 1964, the Council of Arab Economic Unity has established the Arab Common Market and which was confined to four Arab countries: Jordan, Egypt, Iraq and Syria. Libya and the Sudan joined in 1977 and some other Arab countries joined later and did not exceed more than 11 Arab countries from 22 Arab countries.

The most important objectives of the Arab Common Market include:

- Freedom of movement of persons and capital.
- Freedom of exchange of national and foreign goods and products.
- Freedom of residence, employment, employment and economic activity.
- Freedom of transport, transit and the use of means of transport, ports and civil airports.

The Arab common market is so weak in its outcomes because of the weakness of intra-Arab trade and the lack of optimal exploitation of the wealth available in the Arab countries.

The Gulf Cooperation Council (GCC) was established between six Gulf Arab states (Saudi Arabia, Qatar, Kuwait, Bahrain, Sultanate of Oman and the United Arab Emirates) with the aim of establishing a free trade zone among GCC states. Maghreb Arab Maghreb Union (AMU) was established in 1989 and was aimed at unifying the external customs tariff and bringing together Algeria, Morocco, Tunisia, Libya and Mauritania. The Arab Cooperation Council was established in the same year and included all countries (Egypt, Jordan, Iraq and Yemen). The political factors played a key role in the formation of these three blocs, but the events of the region, such as the Gulf War, resulted in the termination of the Arab Cooperation Council because of Egypt's participation in Iraq in the second Gulf War in 1991. While the GCC achieved considerable success in economic integration, In the Doha Conference in 2007 for the leaders of the Arab Gulf countries to agree on achieving monetary union by 2010, but this goal has not
been achieved for those countries, despite the strong political will of the leaders of those countries and for the Arab Maghreb Union is so far paralyzed to political differences between member states. There are attempts by the new President of Tunisia to revive the Arab Maghreb Union again. At the Arab Summit held in Amman on 21 and 22 June 1996, the Conference mandated the Economic and Social Council of the League of Arab States to take the necessary measures to accelerate the establishment of the Free Trade Area in accordance with a program of work and a timetable. This Convention entered into force on 1 January 1998. So far, the status of intra-Arab trade has remained low and did not exceed 14% in 2007. (5). This trade volume is very limited as compared to other world trade blocs such as European Union, 70% ASEAN 40% and NAFTA 50%. Expected inter Arab economic projects are optimized wishes to increase the volume of intra-trade. Arab Free Trade Area (GAFTA) has entered its 14th year by 2012, The Arab countries that have joined the region were: Jordan, Bahrain, UAE, Tunisia, Saudi Arabia, Sudan, Syria, Iraq, Oman, Palestine, Qatar, Kuwait, Lebanon, Libya, Egypt and Morocco. Non-tariff restrictions continue to be the main obstacle to the liberalization of intra-Arab trade and there is an effort to liberalize trade in the services sectors and the expectation that Arab countries will join the Greater Arab Free Trade Area. The historical stations of joint Arab action are not without achievements, but it did not reach the level of desired goals and remained a large gap between the results of Arab efforts and the results achieved by the blocs Such as the European Union (6).

At present, Arab joint action through the institutions of the Arab League is almost paralyzed, even that we are now in the twenty-first century, the League of Arab States in its current situation does not serve the Arabs as this institution suffers from severe dilemmas. It is the cause and the result. The Arab League is retreating when the Arab system recedes. The Arab world entered the twenty-first century and is bound by many of the constraints and problems created by the Second Gulf War in 1991 and the occupation of Iraq and its serious repercussions on the future of Arab development and the events of September 11, 2002. These events have exacerbated various challenges and caused many internal popular revolutions in more than one Arab country for reform and evolution for the better for the Arab citizen and the economies of Arab countries.

The problem of the Arabs in their economic relations is that they confuse economic relations with political relations, they have not realized the need to separate the economic aspect of the relations from the political aspect. European countries had recognized their political differences first, but it also recognized the necessity of the economic cooperation and the benefits they could have. So, they passed this problem quietly and slowly and reached a successful economic formula which is the economic union and concluded that era by issuing the single euro currency and the subsequent establishment of solid foundations for an integrated structure.

There were Western political blocs attempted to find several economic systems to weaken the Arab countries such as the Middle Easternship, the European Mediterranean Partnership, and the Multilateral Investment Agreement and others. The Arab public system oscillated among many political and economic options but did not have the appropriate mechanisms for entering the twenty-first century. The Arabs Summit Foundation is the most prestigious Arab institution ever created and is the only one that can take oral decisions of a disabled national character. The meetings of the Arab foreign ministers are held in different periods, without actual applications. Arabs, leaders and people, realize that this is the era of giant economic blocs. It is suitable for the Arabs to have an economic bloc compared to other world blocs such as the European Union and other global blocs.

b) Obstacles of Arab joint action

Obstacle 1: The reasons for the failure of the joint Arab action can be summed up as follows (7).

1. Lack of continuous and intensive popular initiatives.
2. Lack of formal coordination among Arab countries.
3. The weakness of the Arab opposition parties and the loss of initiative spirits
4. Restrictions imposed by the Arab states themselves on the movement of citizens of other Arab countries.
5. The localism between the Arab countries and the lack of seriousness in the implementation of the Joint Arab Action Charter and the decisions of the League of Arab States.
6. The existence of administrative restrictions on the intra-Arab trade as well as the treaties of many Arab countries with the Western capital markets.
7. The Western European Middle East project has played a major role in thwarting the Arab integrated project because of its political and economic risks.
8. Other notable reasons are no sound scientific methodology, realistic and long-term vision at the same time, and the lack of reliance on the progressive approach of integration, similar to the European Union and other economic blocs. Developing countries, including Arab countries, first need to create trade rather than trade liberalization. This is because developing countries including Arab countries must first effectively use their various resources and diversify their productive structure, same as developed countries do, so that they can
exchange goods among themselves. Joint projects in various fields will help diversify the productive structure and will facilitate the free flow of goods which starts with the gradual economic integration and free trade leading to the final form of integration and economic bloc, similar to the European Union.

The European experience had proven successful because of the principle of gradualism and transparency in dealing with disputes in a flexible manner and the establishment of mechanisms for follow-up and monitoring.

It is worth to point out that the Gulf Arab countries in their Gulf Cooperation Council (GCC) have many commonalities which have made the process of the bloc progressing and some successful compared to other Arab blocs. They have common borders, religious, historical, social and military ties, as well as political systems. In addition, there was agreement among these countries and through the strong political will of these countries to join Jordan and Morocco to the Gulf Cooperation Council, as decided by the Conference of the six leaders of the six Gulf states in May 2011.

Obstacle 2: The fundamentals of the economic integration between Arab countries. The studies of the economies of the Arab World indicate that there are special elements of the Arab countries compared to other giant economic blocs such as the European Union, which can increase the effectiveness of Arab economic integration. These elements can be summarized below:

1. The availability of natural resources, from agricultural lands, forests, pastures, livestock, financial wealth and mineral wealth. It is noted that most of these natural resources have not yet been exploited.
2. The availability of capital largely due to the large oil revenues, especially before the Gulf War in 1991, but alas, these funds did not contribute seriously to the development of the Arab region, because the were directed towards investment in Western countries, which is now estimated at more than a multi trillion dollars and the price of oil now arrived to more than $ 50 per barrel.
3. Availability of human resources in the Arab world, where the population of the Arab world amounts to 160 million people in 1998 and now more than 340 million people in 2017.
4. The breadth of the market in the Arab world, which extends from the Gulf to the Atlantic Ocean.
5. The strategic location, which occupies a middle position between three continents, is Asia, Africa and Europe, this gives it a special economic importance. It also overlooks the Mediterranean, Red Sea, Arabian Gulf, Atlantic and Arabian Sea. There is no doubt that Arab countries are link of the world countries.
6. Arab States have all the complement components of economic integration in addition to the unity of language and unity of origin, history, spiritual values, social environment, and geography.
7. The Arab region represents 10.2% of the world’s area.
8. The size of Arab labor is about 103 million workers in 2002 and in 2017 it exceeds 135 million workers.
9. GDP at current prices amounted to about 717 billion dollars in 2002 and now estimated at more than several trillion dollars. Noting that there is a huge wealth in the Arab world which can be exploited and increase the size of Arab GDP, which should benefit the Arab people and the diversification of the structure of their economies.
10. In terms of intra-trade to total foreign trade, it reached about 14% in 2007 and has increased to about 16% in 2012, and this was achieved by activating the common Arab market and activating the Arab free trade zone.

Obstacle 3: The Mechanism proposed for coordination between Arab regional economic groupings.

To achieve the benefits of the economic integration, regional economic communities need to be coordinated with their needs and the establishment of joint ventures. There is no doubt that the joint ventures constitute an important entry point for economic integration. In order for these joint ventures to achieve their objectives, countries in the Arab regional economic communities need to provide a set of basic conditions that can be summarized as follows:

1. The joint Arab projects shall be within the framework of a comprehensive and real development plan of reality that takes into consideration the long-term economic cooperation and integration
2. The transition from the holding projects that exist now to productive projects that should be distributed between the participating countries should focus on the productive industries and not only on services, as is the case in the Arab world
3. These joint Arab projects should be managed on sound economic foundations, free from political considerations
4. No multinational companies shall dominate in of these projects
5. Arab projects should meet the needs of the Arab countries, especially the countries participating in the project
6. Arab projects should give Arab expertise the priority in managing such projects and should be trained on the latest technological means.
7. Arab joint venture involved not only in financing but should be involved in administration, technology, marketing, and employment according to the available possibilities.
8. The feasibility of these projects should not be based on maximizing profits, but on the basis of the social return on the future of development in the Arab countries.
9. Encourage the private sector to participate with the public sector in the establishment of joint ventures
10. The need to calculate and distribute the dividends fairly among the participating countries.

In January 2009, the Arab Economic Summit was held in Kuwait as the first Arab economic summit in light of the major global changes. As Arabs are now living in an era of economic openness and globalization. The Arab Economic Summit held in Kuwait was a governmental preparation, with the participation of the private sector on an equal footing. Practical measures have been taken to activate joint economic action and remove the obstacles facing the completion of the Arab Free Trade Area and the establishment of the Arab Customs Union as basic steps in establishing the Arab Common Market.

c) Arab Regional Economic Communities

The regional economic gatherings are necessary among the Arab countries in light of the existing conditions and conditions, as stipulated in the League of Arab States Agreement. Article 15 However, there are some caveats that we would like to emphasize as follows:
1. Cooperation and coordination within Arab regional groupings should not be seen as a substitute for joint Arab action
2. These gatherings should not raise their issues in isolation from the issues of the Arab nation so as to give itself a special identity and identity independent of Arab identity
3. These assemblies should not be viewed by their members or by other Arab countries as being opposed to other axes. But must be seen as a natural phenomenon dictated by some of the considerations of the continental, economic, regional and international.
4. The members of these groups are required to maintain their independence against foreign penetration attempts because foreign forces are only interested in bombing and destroying the Arab regional system and cutting it off so that it does not advance in any of the fields and to remain dependent on the outside countries, and this is not satisfied by Arab citizens.

d) Experiences of global economic blocs

The most important economic blocs that have a major impact on the global economy were the European Union bloc, the NAFTA bloc and perhaps also the APEC bloc. These conglomerates hold about half of the world's population and more than 80% of the world's annual production:

i. European Union

The European Union began the first of what began with the so-called Rome Agreement of 1957, which committed itself to specific periods of time to remove the barriers and expand the bloc until now it is composed of 25 members instead of 15 countries, which became a common market in 1993 and later an economic union.

Rome Convention began with four freedoms:
1. Freedom of movement of persons.
2. Free movement of capital.
3. Free movement of goods.

The European Union is the most advanced economic conglomerate. It has succeeded in a comprehensive liberalization of inter-trade and has thus become a unified market in which goods, services, capital and people move. The EU currently contributes about one-third of the world's gross national product. Its share of world trade accounts for about a quarter of the world's trade and it imports about one third from the developing countries.

Although the commitment to the monetary union was not an essential element of Rom's Treaty, the European Union has taken important steps in issuing one currency for this bloc known as the Euro. The Euro has gone through various stages to become an important currency for international trade and trade integration. (9)

ii. NAFTA conglomerate

The idea of this bloc came as a reaction against the European bloc (European Union). The United States of America established the North American Free Trade Agreement (NAFTA), which includes the United States, Canada and Mexico in 1992, with the aim of uniting the Americas economically into a single trading bloc to confront Europe and Japan. The aim of the bloc would enable the United States of America to face the challenges of the 21st century, thereby obtaining a greater share of the new central administration of the world economy (10).

This bloc may outweigh the EU in terms of GDP and the inter trade volume between the bloc members. It can therefore be the largest free trade area in the world. Under the NAFTA agreement, all barriers to trade between partners will be removed, allowing goods to be transported more freely among the three economies by gradually lowering tariffs and other barriers among member countries on goods, services, and investments. Perhaps the biggest beneficiary of this bloc is the US economy despite the US internal opposition to this bloc as it allows access to cheap Mexican goods.

However, many studies have shown that the liberalization of intraregional trade will have multiple effects for its partners as it can add new jobs in the United States, flow of US and Canadian capital to
Mexico, and Canada's exports will increase, particularly in the area of financial services and telecommunications.

Some writers believe that the United States (US) called for this bloc for the following reasons: (12)

1. It fears of Europe's economic power.
2. Its concern about Japan's economic, industrial and technological power.
3. The American concern about the exploitation of a united Europe to extract trade concessions from the United States if it remains alone.

iii. Other regional blocs

There are other regional blocs in Asia, South America and Africa. Apart from the ECAP and the ASEAN blocs, the other blocs did cope with the huge economic blocs that we mentioned earlier (EU and NAFTA).

The ASEAN bloc in Asia and the COMESA bloc in Africa, are the only economic blocs in developing countries and are less important than those of the developed countries. However, these economic blocs are resorted by developing countries to be in a better economic bargaining situation than being individual economies against the large economic blocs such as the European Union or the NAFTA.

Other important bloc which is the APEC, that includes both developed and developing countries located on the edges of the Pacific Ocean and include 14 countries. These countries, include the United States of America, include more than half of the world's production and represent (40 to 50)% of world's trade. (13)

The most important regional bloc of the developing countries is the Southeast Asian bloc, ASEAN. In Africa, there are some regional economic blocs which includes the Coast-Saharan States, the Economic Community of West African States bloc (ECOWAS), and the COMESA. COMESA bloc is one of the most successful regional conglomerates on the African continent. It was founded in 1994 to replace the East and South African Trade Preferential Agreements (SEPAZ) area of 1981. The main objective of this consortium is to benefit from the large size of its member markets through the development of trade, natural and human resources, the mutual interests of its Member States to become in a better status when negotiating with other parties.

Arab economies regrettably acting individually with the large global economic blocs. The whole world is moving towards the economic bloc to benefit from the benefits of the economic bloc that was mentioned earlier to be in better negotiating conditions in the various fields, but instead, the Arab economies are heading towards separatism and individualism in dealing with the global blocs. It is worth to state that the 340 million Arabs now unfortunately produce less than a middle country in the EU like Spain or a quarter of Italy's national product.

All Arab interested economists revealed that there are three alternatives to the Arab world:

1- Retreat and be in isolation which leads to more backwardness.
2- Engage in subordination and submission to other global economic blocs.
3- Enter into a real Arab economic bloc and integration and as the world is heading to the blocs, the third alternative is the best for the Arab world.

As has been explained earlier that of the main reasons for the success of the European experiment was that it was based on the common economic interests of its countries, which in turn had contributed to the protection of the political interests of the EC Member States. It worth to add that the EU project, that began 55 years ago, has achieved a unique success, despite the fact that its countries and its people have a long history of war and conflict.

The Arab world was the first region in the world to have a regional gathering after the Second World War, but unfortunately, Arabs did not progress towards integration with the same enthusiasm that others, like the European Union, have done. The Arab world currently has a lot of economic unity and integration factors, much better than the Europeans, both in terms of material and human moral components such as common language, customs and traditions. It is of deem necessity to be gradual in applying the degrees of economic integration. It worth to indicate that the Europeans have been successful due to the reliance on the principle of gradualism and transparency in dealing with political differences in a flexible manner and the applying a variety of mechanisms to follow-up and monitor the integration process. There are more than 500 million consumers in the EU from 25 countries who can buy their goods from any of these countries without hindrance and are subject to the same policy and criteria and have similar credit cards and can travel from one country to another without restrictions.

It is worth to conclude that the availability of the political will with all Member States accompanied by their relinquishment of some parts of their sovereignty for the sake of complementarity. The return of this complementarity through collective action is the only way to reap the fruits and benefits of the economic bloc among Arab countries. The aspirations of the Arab peoples began in 2011, starting with Tunisia, Egypt, Yemen, Libya, Syria and some other Arab countries towards the amalgamation and the creation of a strong Arab bloc away from the World blocs and keep away from their unjust policies and unfair nesses. It is the will of the Arab peoples that will achieve the aspirations sooner or later and then will gain the respect of the Western countries.
VII. Arabs and Challenges

In this chapter, the researchers will address a number of challenges that have faced and are still facing the Arab world, which have weakened the economic, social, political and military strength of the Arabs. The main reason is the absence of sincere and serious political will:

a) Arabs and the challenge of globalization

The word globalization has become one of the most talked-about phenomenon in contemporary literature. It has become the biggest concern of all societies, governmental institutions, research centers and the media of all kinds due to its current and potential results (15).

The phenomenon of globalization is defined as “the integration of the world's markets into the rights of trade and direct investment within a framework of free market capitalism, and thus to penetrate national borders and to the great decline in the sovereignty of the State.” (16).

Much of the talk about globalization in the past and present century is not the result of the emergence of the phenomenon Globalization, but its growth at an accelerated rate, but it is necessary to emphasize that the main factor responsible for the emergence, continuation and acceleration of this phenomenon is the current technological progress and development by the industrialized countries and the. The globalization was called the New Age, which must be adopted by the developed countries.

The first wave occurred during the period 1870-1914 when the progress in the means of transportation which opened the way for some countries to use the abundance of their lands to increase production and multiply exports and the growth of foreign capital by more than three times in the countries of: Africa, Asia and Latin America, about 60 million people had immigrated from Europe to North America or what is called the New World. The influx of workers from the more densely populated countries such as China and India to the less dense countries such as Sri Lanka, Vietnam, the Philippines and Thailand. The world total volume of labor migration was about 10% of the world population.

The second wave of globalization was during the period 1951-1981. It focused on the integration of the rich countries through the multilateral trade liberalization process under the auspices of the General Agreement on Tariffs and Trade (GATT). The exports of developing countries in this period were limited to raw materials. Then third wave started in 1980, which was associated with the advancement of information and communication technologies. The main outcome of this globalization wave is that the wealth gap between the poor and the rich has increased and is accompanied by migration waves from poor countries to rich countries.

Globalization in essence means the cancelation of the borders of the world countries in the economic, financial and commercial sectors. and leaving products, currencies, labor move across the world and within a space that includes all the globe.

The phenomenon of globalization takes three dimensions:

1. Wide dissemination of information
2. The borders between States shall be dissolved
3. Increase the similarities between the community and communities and institutions and dissolve differences.

The challenges of the twenty-first century are complex and difficult, including globalization, and the state that is currently working to impose or promote this phenomenon for a long time is the United States of America, which wants “American hegemony” or “America of the world” and it used for this its political strength and military ability and modern communication techniques.

The main element of globalization is multinational corporations (MNCs).

It is important to point out the negative impact of the phenomenon of globalization on our Arab homeland. It is very clear that the American hegemony on the Arab nation as being rich and has a strategic and social depth has allowed to the United States of America, to dominate the Arab rich countries especially after the Gulf War in 1991 and in a bid to achieve its purposes in tightening its grip on the Arab oil wealth and control it for using it as a weapon against its opponent countries in Europe and Asia, and intends to control of the Arab consumption market stretching from the Gulf to the ocean.(17)

The invasion of Kuwait contributed to the tension and has caused a great rift in the body of the Arab world and the destruction of the joint Arab defense agreement signed between the Arab countries. As Arab countries have agreed to solve any disputes or conflicts by negotiation or by Arab League conferences and it is not permissible for any Arab country to attack another Arab country no matter how complicated the circumstances are between the Arab countries. The last invasion had led to the collapse of the Arab system and expose it to the world forces and led to the current weakness, rivalry and losses of human and financial resources estimated at 650 billion dollars, and had given a great opportunity for American to over control the Gulf Area.

As per the American hegemony, and the new unipolar world order, many critics had been raised by many policy experts, the American professor Herbert Spieler in his book The Media and the American Empire. Sharp criticism also for the roles played by multinational companies(MNCs), especially the American giant ones.
and their role in weakening the developing countries’ economies, including the Arab countries. American wealth has stepped to be the highest in the world, there are about 358 world billionaires, the majority of them are Americans who possess the wealth of the equivalent of the 2.5 billion people of the world, or equal to the total wealth owned by half the World Population (19).

Multinational corporations are a key element in the globalization concept. These companies are very large, with the annual sales of one of them exceeds the gross domestic product of a large number of developing countries, including Arab countries. As well, their direct investments in many countries of the world are now limiting the sovereignty of these countries.

This means that if a country wishes to pursue certain policies in favor of the local citizens that would adversely affect the profits of one of its subsidiaries, the parent company closes its branch in country and transfers it to another place, which in turn is a deterrent to the host country.

It is important and vital to indicate that multinational corporations are the phenomenon of modern colonialism. They consider the world an open market. Developing countries are the victims of such companies as they are currently controlling their economies, as well as spreading corruption, bribery and subordination for the sake of their interest. Consequently, this deepens the gap between the so-called free capitalist world who is highly developed technologically, scientifically and informally and the developing countries who are politically and scientifically shattered.

The main problem in the Arab world is the domination of the United States of America, which does not want any good for the Arab world governments and peoples, but even more to tear the Arab countries into states. Economic globalization has been accompanied by waves of brain drain from developing countries to the developed industrial countries, which tend to favor educated labor and expertise, leading to the depletion of human minds from developing countries.

b) Arabs and the challenge of development

This challenge is faced by all developing countries, including Arab countries once they gained political independence. Development trends in the Arab countries are known to have been country-driven and have not achieved high growth rates and have not achieved economic security and food security. There are enormous natural and human potentials in the Arab countries that are underutilized.

Unfortunately, most of the Arab development experiences have resulted in more than 160 tentative development plans were introduced up to 2011. But results contradicted the real development goals.

These results include the following: (23)
1. More economic dependence on the outside, despite the enormous potential and wealth of Arab countries.
3. High inflation rates between Arab countries.
4. High unemployment rates between Arab countries.
5. Decline in overall economic performance.
6. Weak investment and savings.
7. Poor agricultural and industrial production.
8. Continuity of increasing external indebtedness.
9. The continued flow of Arab funds abroad.
10. Limited interaction and integration among Arab countries.

In order to address these problems, the optimal solution lies in economic integration among the Arab countries because there is a strong relationship between integration and development. This relationship is reflected in the development of revenues that integration can create for the contributing parties. Economic blocs are able to achieve certain objectives better than those that can be achieved by individual states (24). This means that the relationship is the connection of the means to the goal as it is assumed that integration is the best alternative means for development. It is worth to conclude that: while not every track of development is central to integration, every track of integration is central to development (25).

There are huge potentials and riches distributed among the Arab countries but not exploited optimally due mainly to the lack of sincere and serious political wills in the approach towards the optimal utilization of the wealth available in the Arab countries.

VIII. Conclusion And Recommendations

a) Conclusions

Through our review of the joint Arab action process and the various challenges, we find that the reality of Arab economic cooperation is weak. The challenges of the twenty-first century require activating the joint Arab action to be able to confront the global economic challenges through a genuine Arab economic bloc supported by sincere and honest political will.

The future of the Arab economy depends on the extent of the objectivity of the clear strategy of the Arabs against the international economic changes for the future of an Arab nation that is strong economically, socially, politically and even militarily. Joint Arab action is the only way to confront all risks and challenges and the Arabs must be treated as one bloc within the framework of the global system and in front of other blocs. Either they work together or the Arab states will dwarf down and finally disappear one by one under the weight of globalization and other global challenges. Arab integration is the right way to face the challenge of
globalization and others and to get development and liberalization. This is the surest way to preserve the Arab presence on the international scene.

b) **Recommendations**

In order to achieve future prospects for an Arab nation to be strong economically, socially, politically and even militarily with the availability of sincere, honest, and serious political will. The most important recommendations can be summarized as follows:

1. The availability of political will and credibility in dealing with the issues of the Arab economic integration, which hoped to achieve the national interest in the context of achieving the Arab community objectives.
2. The sincere and honest recognition of the existence of the Arab nation as an Arab system that is economically, socially and politically strong with basic and radical amendments to the Charter of Arab League and its organizations regarding their authorities, decision-making, implementation mechanisms and dispute resolution powers.
3. Neglect the differences, passive attitudes, and hatred among Arab countries and to stand united in front of all challenges.
4. The establishment of an Arab court of justice to resolve disputes between Arab countries and to avoid any military method in resolving disputes between Arab states.
5. Stabilize the strategy of self-reliance to achieve real economic and social development in order to reduce dependence on the outside and ensure the satisfaction of the basic needs of the Arab people.
6. Creating a strong Arab economic system that satisfies the Arab demands locally and not be a game in the hands of international organizations to fulfill their requirements on Arabs, such as relying on the World Bank or the International Monetary Fund.
7. Coordinating Arab positions and policies towards the World Trade Organization, the European Union and other economic blocs.
8. Giving the public sector the attention it deserves to strengthen and modernize it and provide it with efficient personnel.
9. Give the workers appropriate pay and follow the methods of economic management and accounting and provide the conditions for obtaining higher profitability, and improve its competitive and productive situation by implementing the principles of accountability and responsibility.
10. There must be a comprehensive economic and administrative reform program, based on the principles of law, combating corruption, improving productive capacities, and the principle of transparency in the relationship between the citizen and the state.
11. Basic reforms in the structure of the Arab output are to be implemented to rectify the imbalance, through diversification in productive activities, rather than relying on the contribution of one commodity and a few commodities in the Arab trade.
12. Encourage intra-Arab investments through joint projects among Arab countries in order to increase the volume of inter-Arab trade.
13. Follow-up and activate the Arab Trade Zone, which began in 1998 and activate the Arab common market.
14. To face the phenomenon of globalization and other challenges via dealing with the factors of progress and technology and adaption of the regional and international changes in terms of dealing with awareness of science and technology, culture and information and all the variables and laws of contemporary globalization, taking advantage of the agency of the strengths available in Arab economies.
15. Arab countries should work to develop the economic institutions and establish a statistical center in each Arab country and be connected with the Arab League to provide Arab States with all the necessary statistics to prepare the plans for the present and to forecast for the future.
16. Increasing the participation of the Arab private sector in the joint Arab economic and social work by increasing the volume of joint Arab investments between the public and private sectors rather than the exit the Arab private sector funds outside the Arab world.
17. Developing and progressing joint Arab action, especially in the field of scientific research, technological development, creativity and knowledge.
18. Establish an information network to facilitate the smooth movement of Arab goods and services and open the Arab States borders to transfer Arab labor and capital away from political and security sensitivity and reduce dependence on non-Arab labor.
19. To prepare scientific, logical and realistic studies on the problems of unemployment, poverty, inflation, external indebtedness and other problems, and gradually solve them through a sincere approach to the optimal exploitation of Arab wealth available in Arab countries.
20. Work on the spread of real democracy in all Arab countries and the expansion and deepening of the Arab national belonging to all the Arabs.

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A Macroprudential Perspective on Financial Stability

By Christian Pinshi Paula

University of Kinshasa

Abstract- The need to strengthen the macro prudential orientation of financial regulatory and supervisory frameworks stays a priority for financial and real healthy. Stability financial threatened with endogenous and exogenous risks translating crises, hence it has to a healthy regulation for the reduction risks. Macro prudential policy proves to be a best regulation for limiting systemic risk.

We wonder about adoption a framework macro prudential for stability financial in Democratic Republic of the Congo (DRC). The correlation between countercyclical capital buffer and stability financial justify to make use of framework macro prudential. The causality analysis put in light the effect of policy macro prudential on financial stability. The coefficient of reserve requirements, used like an indicator par excellence, and countercyclical capital buffer cause financial stability. That’s justify an adoption of frame work macro prudential in DRC.

Keywords: monetary policy, financial stability, macro prudential policy.

GJMBR-C Classification: JEL Code: G29

Strictly as per the compliance and regulations of:
A Macroprudential Perspective on Financial Stability

Une Perspective Macroprudentielle Pour La Stabilité Financière

Christian Pinshi Paula

Résumé- La nécessité de renforcer l’orientation macro prudentielle des dispositifs de régulation et de surveillance demeure une priorité pour la bonne santé financière et réelle. La stabilité financière est menacée par les risques endogènes et exogènes traduisant les crises, d’où il faut une régulation saine pour la réduction des risques. La politique macro prudentielle s’avère être une meilleure régulation financière en réduisant le risque systémique.

Nous nous interrogeons sur l’adoption d’un cadre macro prudentiel pour la stabilité financière en République démocratique du Congo (RDC). Le coussin de fond propre contra cyclique est fortement corrélé avec la stabilité financière. Cela justifie la mise en œuvre d’un cadre macro prudentiel.

L’analyse de la causalité a mis en lumière l’effet de la politique macro prudentielle sur la stabilité financière. Les coefficients de réserve obligatoire en franc congolais et en dollar, utilisés comme indicateurs par excellence et le coussin de fond propre contra cyclique causent la stabilité financière. Cela justifie une adoption d’un cadre macro prudentiel en RDC.

Enfin nous avons proposé un meilleur cadre de gouvernance pour une politique macro prudentielle en RDC. Le jeu doit être coopératif mais flexible avec la politique monétaire, c’est-à-dire on doit créer une direction générale ou une institution macro prudentielle autonome. Cependant la politique monétaire doit avoir un droit de veto sur cette direction générale de la stabilité financière.

Mots-Clés: politique monétaire, stabilité financière, politique macro prudentielle.

Abstract- The need to strengthen the macro prudential orientation of financial regulatory and supervisory frameworks stays a priority for financial and real healthy. Stability financial threatened with endogenous and exogenous risks translating crises, hence it has to a healthy regulation for the reduction risks. Macro prudential policy proves to be a best regulation for limiting systemic risk.

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Keywords: monetary policy, financial stability, macro prudential policy.

I. Introduction

A vant la crise financière de 2008, la stabilité macroéconomique garantissait la stabilité du système financier, la régulation micro prudentielle poursuivait une surveillance des chaque composantes du système financier en gérant le risque idiosyncratique qui avait comme finalité la stabilité financière.

Dès lors que survient la crise financière internationale, cette manière d’analyser le système financier a montré des limites, et il y a eu catastrophe économique et financière. Les politiques macroéconomiques et micro prudentielles n’étaient pas suffisantes pour la maîtrise du risque systémique. Puisque le dysfonctionnement du système financier a eu de graves répercussions sur l’économie réelle, cette dernière s’est estompée puis le résultat a été la grande crise. Les économistes ont axé leurs analyses sur l’approche macro prudentielle du système financier dans le but de maîtriser et atténuer le risque systémique pour assurer la stabilité financière.

Ce papier va s’articuler autour de quatre principaux points : nous allons essayer de clarifier sur les bases de la stabilité financière ; sur le cadre analytique de la politique macro prudentielle ; puis un cas pratique de l’effet de la politique macro prudentielle sur la stabilité financière en République Démocratique du Congo et enfin proposer une gouvernance macro prudentielle pour le cas de la République démocratique du Congo.

II. Qu’est-Ce Que La Stabilité Financière

La définition de la stabilité financière est un peu ambiguë, beaucoup d’économistes en parlent mais rares sont ceux qui la définissent ou en font une définition trop savante. Quand on parle de la stabilité financière il faut d’abord se demander s’il on cherche la stabilité de quoi ? Il faut bien avoir à l’esprit, que

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lorsqu’on parle de la stabilité financière il s’agit de la stabilité du système financier. D’où la question est de savoir qu’est-ce qu’un système financier, ainsi, la réponse à la question de la stabilité financière pourrait être claire.

Le système financier est l’ensemble des institutions financières (Banques, institutions collectrices des dépôts, microcrédits,…), des marchés financiers (marché monétaire, marché financier au sens strict,…), et les infrastructures financières (système de paiement, de compensation, de règlement, judiciaire,…c’est la tuyauterie du système financier) qui dirigent les capitaux des agents à capacité de financement (épargne) vers ceux à besoins de financement (investissement).

Le système financier a plusieurs fonctions :

- Fournir un moyen d’échange et une réserve de valeur appelée monnaie, laquelle sert également d’unité de compte pour mesurer la valeur des transactions ;
- Fournir des moyens de transfert des ressources économiques dans le temps, dans l’espace, et entre les entreprises, les ménages et l’Etat ;
- Transférer des fonds des agents économiques (ménages, entreprises…) qui épargnent, puisqu’ils sont en capacité de financement, vers les agents économiques qui souhaitent emprunter, c’est-à-dire qui sont en besoin de financement ;
- Fournir des moyens de gérer le risque ;
- Fournir un moyen d’échange.

La fonction principale du système financier est de diriger les fonds des agents à capacité de financement (épargnants) vers ceux en besoin de financement (investisseurs). Donc le système financier facilite le lien entre épargne et investissement.

À présent la définition de la stabilité financière devient claire, la stabilité financière c’est la stabilité du système financier, c’est l’absence de crise financière (perturbation ou dysfonctionnement du système financier). Cette définition est saine et simple. Cependant, la stabilité financière ne se résume pas qu’à la simple absence de crises.

Un système financier est stable :

- S’il réalise ses fonctions ;
- S’il est résilient aux chocs tant endogènes qu’exogènes ;
- S’il conserve la capacité d’exercer ces fonctions essentielles même face à des chocs externes ou à une accumulation des déséquilibres ;
- S’il facilite le lien entre épargne et investissement.

Ce qu’il faut comprendre estque, la stabilité financière est une situation qui correspond au bon fonctionnement ou à la robustesse du système financier (Pinshi, 2016). Dès lors que ses trois composantes fonctionnent bien, il y a stabilité financière. Une perturbation dans l’une des composantes peut saper la stabilité financière. Cependant, un système financier peut bien fonctionner s’il réalise ses fonctions même si l’une des composantes a des perturbations. Beaucoup des pays en développement ont des systèmes financiers sous-développés et ce sont les institutions financières (sector bancaire…) qui restent la composante dominante. Ces pays ont parfois une absence du marché financier au sens strict (bourse, obligation,…).

a) Gestion de la stabilité financière

i. Gérer les risques

La gestion de risque demeure l’activité principale des régulateurs financiers dans le but de stabiliser le système financier. Nous analysons deux types de risques : exogènes et endogènes.

Les risques exogènes sont des risques provenant de problèmes extérieurs au système financier. Le système financier devient fragile face aux risques exogènes tels que :

- Risque lié à l’environnement économique et au climat des affaires ;
- Instabilité politique et période des élections ;
- Guerre ;
- Perturbation macroéconomique : volatilité de l’inflation, dépression, déflation, déséquilibre de la balance de paiement, forte dépréciation monétaire et forte appréciation réelle de la monnaie ;
- Catastrophes naturelles ;
- Chute des cours des produits de base et faillites de grandes entreprises ;
- Corruption.

Les risques endogènes sont des risques provenant de problèmes intérieurs au système financier (institutions financières, marchés financiers et infrastructures financières). Le système est vulnérable au risque provenant de ses propres composants :

- Le risque de crédit est l’incapacité d’une contrepartie de s’exécuter aux termes d’un accord contractuel, c’est le comportement insolvables des débiteurs. À cette situation l’institution financière s’expose à la faillite.

1 Il s’agit de trois fonctions de la monnaie, le système financier assure la bonne santé de ces trois fonctions.

3 L’absence du marché financier au sens strict ne sous-entend pas une absence du système financier, même si l’une des composantes est absente, le lien entre l’épargne et l’investissement n’est pas rompu puisque la finance intermédiaire assure toujours ce lien.

4 Donc la source est en dehors des composantes du système financier.


6 Cf. comité de Bâle (1997).
• Le risque pays est un cas particulier du risque de crédit, c'est le comportement insolvable d'un pays envers ses créanciers nationaux ou internationaux ;
• Le risque de marché provient des pertes bancaires suite aux variations des prix du marché, telles que : l'évolution défavorable du taux de change, du cours des matières premières, etc. ;
• Risque de currency mismatch (asymétrie de devises ou décalage monétaire), c'est le fait que la banque ait un passif en devise supérieur à son actif en devise 7 ;
• Risque de maturity mismatch (asymétrie des échéances ou décalage de maturité) c'est une situation où les dépôts bancaires sont à court terme alors que les prêts sont à long terme ;
• Le risque de taux d'intérêt réside dans la vulnérabilité de la situation financière d'un intermédiaire financier à une évolution défavorable des taux d'intérêt ;
• Le risque de liquidité résulte de l'incapacité d'une banque de faire face à une réduction de son passif ou de financer un accroissement de son actif. Ce risque est le comportement brusque des retraits massifs de dépôts par un grand nombre des déposants. Une liquidité insuffisante conduit à une situation d'insolvabilité bancaire 8 ;
• Le risque opérationnel est lié à la mauvaise gestion interne d’une institution financière, à la carence de contrôle interne, au non suivi dupersonnel,…etc ;
• Le risque juridique provient du non-respect des règles juridiques, des lois,…etc ;
• Le risque de réputation réside dans la perte de confiance des clients suite au dysfonctionnement opérationnel, à l'incapacité des institutions à satisfaire ses clients, et à suivre les règles,…
C’est dans le canal des risques que surviennent les dysfonctionnements du système financier et les crises financières. Limiter et prévenir les risques reste l’activité principale de la régulation financière pour atteindre la stabilité financière.

ii. Réduire le risque idiosyncratique
L’approche micro prudentielle a pour but de stabiliser le système financier par le truchement d’une réduction idiosyncratique de chaque institution. 

La politique micro prudentielle est une régulation de manière individuelle qui vise la solvabilité des institutions financières et brigue à préserver leur solidité. Cette régulation suit de manière individuelle, les fonds propres et le niveau d’endettement, la liquidité et les ressources que doivent avoir chaque institution pour faire face au risque. Cette approche analyse le système financier individuellement sans prendre en compte les interactions avec l’économie réelle, les expositions communes des institutions, la cyclicité financière, les liaisons entre institutions.

Cette approche a montré ses limites car elle n’a pas pu gérer le risque systémique et prévenir la crise financière de 2008.

iii. Assurer la stabilité macroéconomique
Avant la crise financière, la politique monétaire assurait la stabilité du système financier par le truchement de la stabilité macroéconomique 9 , et donc de la stabilité des prix.

On ne se préoccupait pas de faire des gymnastiques pour assurer la stabilité financière puisque le taux d’intérêt qui est le principal cadre opérationnel de la politique monétaire réagissait à l’économie réelle et au système financier. De même pour les autres cadres opérationnels de la politique monétaire. D’où, plus la peine de se préoccuper de la stabilité financière car elle dépend de la stabilité macroéconomique. Quand survint la crise financière, il y eut des doutes sur cette approche de la politique monétaire à assurer la stabilité financière. D’où la nécessité de renforcer l’analyse de la stabilité financière. L’adoption d’une approche macro prudentielle est alors justifiée.

b) Renforcer la gestion de la stabilité financière
Les insuffisances des politiques micro prudentielle et macroéconomique à assurer la stabilité financière ont conduit à renforcer la dimension de l’analyse de la régulation financière.

L’approche macro prudentielle analyse le système financier dans son ensemble, tient compte du risque systémique (risque touchant l’ensemble du système financier) et limite les effets perturbateurs du risque systémique sur l’économie réelle.

Cette approche une vision d’ensemble du système financier, elle analyse les interrelations du système et limite les effets des cycles financiers sur l’économie réelle. Elle doit être claire et bien définie. Le renforcement de la gestion de la stabilité financière est sa particularité.

i. Une brève revue de littérature 10
Le terme « macro prudentiel » n’est pas nouveau. Depuis la fin des années soixante-dix, la BRI 11 utilisa ce terme pour désigner une étude systémique du système financier et proposa des dispositifs réglementaires (BRI, 1986). Bien qu’on s’attache trop à la solidité financière prise individuellement sur chacune des institutions financières, le terme fut utilisé par le FMI

7 Les dépôts peuvent être en devise alors que les prêts sont souvent libellés en monnaie nationale.
8 À cette situation, les institutions financières deviennent incapables de répondre à leurs échéances financières.
9 De manière générale la stabilité macroéconomique est mesurée par le taux d’inflation et c’est la politique monétaire qui a comme objectif final la stabilité des prix.
10 Cette revue de littérature théorique est centrée sur l’article de Borio (2009) « l’approche macro prudentielle appliquée à la régulation et à la surveillance financière ».
11 Banque des règlements internationaux (Suisse)

III. Cadre Analytique de la Politique Macroprudentielle

a) Définition

L’approche macro prudentielle nous renvoie à une vision macroéconomique de la supervision du système financier, à l’interaction entre le système financier et l’économie réelle et aux interdépendances qui unissent les composantes du système financier en vue de réduire le risque systémique. D’où la politique macro prudentielle est une politique qui recourt principalement aux instruments prudentiels (fonds propres, les ratios financiers,...) pour limiter le risque systémique qui peut avoir de graves répercussions sur l’économie réelle (l’activité économique). Un risque devient systémique qu’à partir du moment où le dysfonctionnement du système financier affecte significativement l’activité économique (Noyer, 2014). La politique macro prudentielle est une politique préventive, elle prévient un éventuel déséquilibre (crise) du système financier et applique des stratégies pour éviter une crise financière. Sa force réside dans son caractère préventif. Elle ne doit pas seulement prévenir mais être résiliente et capable d’absorber les chocs.

b) Objectif

L’objectif de la politique macro prudentielle doit être clair et bien défini, le mandat hiérarchique ou l’objectif final de la politique macro prudentielle doit être la stabilité financière. Celle-ci est complexe, d’où il faut chercher l’objectif intermédiaire pour stabiliser le système financier (cf. tableau 1).

Tableau 1: Perspective macro prudentielle

<table>
<thead>
<tr>
<th>Politique macroprudentielle</th>
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<tbody>
<tr>
<td>Objectif intermédiaire</td>
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<tr>
<td>Limiter le risque systémique</td>
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<tr>
<td>Réduire la probabilité d'une crise financière</td>
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<tr>
<td>Dimension temporelle (dynamique)</td>
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<tr>
<td>Atténuer la procyclicité du système financier</td>
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<tr>
<td>Dimension transversale</td>
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<tr>
<td>Réduire les expositions communes des institutions financières</td>
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<tr>
<td>Limiter la contagion</td>
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<tr>
<td>Objectif final</td>
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<tr>
<td>Stabilité financière</td>
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L’objectif intermédiaire est de limiter le risque systémique et de réduire la probabilité d’une crise financière. Généralement le risque systémique traité par la politique macro prudentielle se manifeste dans deux dimensions, il s’agit de la dimension dynamique ou temporelle et de la dimension transversale. La dimension temporelle vise à contrer le caractère procyclique du système financier en atténuant les cycles financiers tandis que la dimension transversale vise à réduire les expositions communes des institutions et à limiter les effets contagions.

c) Analyse bidimensionnelle

i. Dimension temporelle

L’analyse de la politique macro prudentielle du risque systémique en dimension temporelle traite le problème des cycles financiers. Caruana et Cohen (2014) définissent le cycle financier comme un “phénomène systémique dans lequel la perception de la valeur, du risque et des contraintes de financement contribue à l’augmentation progressive et à la diminution (habituellement) plus rapide de la valeur des actifs et du crédit dans tout le système financier ». La politique macro prudentielle doit être contra cyclique. Dans cette dimension, la politique macro prudentielle contra cyclique peut avoir deux orientations.

- Renforcer la résilience du système financier

Le système financier doit avoir la capacité de résister aux chocs, que ce soit endogène ou exogène. La constitution d’un coussin contra cyclique de fonds propres pendant la période d’expansion pourrait être un volant contra cyclique en période de récession. Ce

Source : l’auteur

12 Vous pouvez lire le guide du FMI sur les indicateurs de solidité financière pour bien comprendre les instruments prudentiels. (2006)
13 Cette définition est dérivée de la définition du Conseil de la stabilité financière (CSF), du FMI et de la BRI. (2011)
Modérer le cycle du crédit

Nous distinguons généralement trois compartiments des cycles financiers : le crédit, le logement (immobilier) et les actions (Kose et al., 2011). Nous nous concentrions plus, sur le cycle de crédit.

L’excès puis le rationnement de crédits ont conduit à la crise financière.

Modérer le cycle des crédits revient à diminuer l’intensité excessive de la croissance du crédit bancaire, car la croissance excessive de crédit14 aboutit souvent à une crise financière.

Le coussin de fonds propres contra cyclique peut en elle-même avoir pour effet de restreindre le crédit et l’envolée du prix des actifs (Caruana et Cohen, 2014).

Toutefois la mise en place du coussin de fonds propres contra cyclique est complexe, il faut qu’on privilégie plus un outil robuste et plus simple à gérer, comme les réserves obligatoires. Ce coefficient est un outil très ancien dans la régulation du système financier et il est bien maîtrisé par les Banques centrales (Agenor, 2015).

iv. Dimension transversale

L’analyse de la politique macro prudentielle de risque systémique en dimension transversale traite sur les interconnexions et les interdépendances entre les institutions financières. Ces institutions s’exposent à un risque commun qui devient donc systémique.

Ces institutions s’exposent à ce risque parce qu’elles sont liées, par un marché monétaire où elles se prêtent le jour le jour. Une institution d’importance systémique, c’est-à-dire son risque peut se transmettre à un risque du système financier dans son ensemble. C’était le cas des États-Unis en 2008 avec Lehman Brothers qui était une grande banque d’importance systémique. Sa faillite a généré une grande crise via un effet contagion et un effet domino sur d’autres institutions.

La contagion peut se transmettre même par les comportements mentaux, la confiance des clients vis-à-vis des institutions, c’est ce que nous appelons le risque mental15 supposons qu’il y a une faillite dans l’une des institutions, les clients des autres institutions peuvent se dire en eux-mêmes que, si celle-là est en faillite, les nôtres peuvent aussi l’être, d’où les comportements confiants des clients à l’égard de leurs banques se détériorent et peuvent résulter par un retrait massif des dépôts (run) ou par une grande aversion au risque. Cette contagion, nous l’appelons risque mental ou contagion mentale, qui se traduit par un risque systémique.

Pour une surveillance dans cette dimension, les contrôleurs doivent collecter des données des chaque institutions (et du marché) qui permettent de constituer une base d’informations communiquées de manière récursive à chaque semaine et sélectionner les établissements jugés importants en terme de contribution au risque systémique, sur la base d’un certain nombre de critères (taille, interconnexions, modèles de financement, etc.). (Caruana, 2009).

Selon Borio16, « Il faudrait commencer par mesurer le risque systémique de perte extrême, évaluer la contribution de chaque établissement à ce risque puis ajuster les outils (exigences de fonds propres, primes d’assurance, etc.) en conséquence. Cela impliquerait de soumettre à des normes plus strictes les établissements dont la contribution est plus importante ».

À ce niveau la politique macro prudentielle doit limiter par une infrastructure solide le risque systémique découlant des interdépendances entre composantes du système financier.

IV. Effet de la politique macro prudentielle sur la stabilité financière : cas de la République démocratique du Congo

Cette troisième section analyse les effets d’une politique macro prudentielle sur la stabilité financière en République démocratique du Congo (RDC). L’analyse va porter sur la corrélation entre la politique macro prudentielle et la stabilité financière, puisqu’une corrélation n’est pas nécessairement une causalité, l’effet macro prudentiel sur la stabilité financière sera capté par l’analyse de la causalité. Cette section se terminera par une analyse du seuil de la crise financière en démontrant quantitativement que les institutions peuvent accorder des crédits sans prendre des risques des crises.

a) Brève revue de la littérature et Restrictions


La libéralisation financière stimule les entrées de capitaux qui se traduisent par un excès de liquidité et peuvent ainsi conduire à un accroissement des crédits bancaires et de la monnaie en circulation. Lorsque ces entrées massives de capitaux dans l’économie sont intermédiiées par un système financier sous développé

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14 Même si toutes les périodes d’expansion du crédit bancaire ne se traduisent pas par une crise financière, la quasi-totalité des crises financières sont précédées par une croissance excessive du crédit.

15 Borio (2009)
et peu réglementé, elles entraînent une augmentation de la consommation et, par conséquent, des importations tandis que l’investissement reste faible, l’économie devient alors plus vulnérable aux chocs exogènes (Sa, 2006 ; Kaminsky et Rein hart, 1999). Un excès de crédit a tendance à accroître les déséquilibres macroéconomiques internes en provoquant une demande excessive, des tensions inflationnistes et en générant des bulles spéculatives sur les prix d’actifs (Allen et Gale, 2000 ; Rajan, 2009). Une évaluation du système financier congolais a été opérée par le Fonds monétaire international (FMI) en 2014, ils ont trouvé comme résultat, que le système financier congolais reste vulnérable et la capacité d’analyse et de contrôle est moindre.

Caruana et Cohen (2014) et Draghi (2011) montrent qu’il est nécessaire d’avoir un volant de fond propre contra cyclique pour modérer le cycle financier, plus précisément le cycle du crédit. Agenor (2015) quant à lui ne donne pas trop d’attention au coussin de fonds propres contra cyclique, car dit-il, qu’il est plus concret de gérer le dysfonctionnement du système financier par un instrument plus simple et connu tel que la réserve obligatoire. Au lieu de trop se concentrer sur ce coussin difficile à rendre opérationnel.

Les restrictions de cette étude sont :

- Compte tenu de la difficulté à quantifier la dimension transversale, par insuffisance des données, l’étude se focalise dans la dimension temporelle ;
- La stabilité / l’instabilité financière est mesurée par la croissance de crédit et le cycle du crédit ;
- La stabilité / l’instabilité financière est mesurée par la volatilité du cycle de crédit ;
- Nous ne prenons pas en compte la vulnérabilité du système financier Congolais vis-à-vis de l’extérieur.

b) Analyse graphique de la corrélation

L’approche macro prudentielle met en relation la sphère financière et la sphère réelle. La croissance du PIB réel est utile pour capter la sphère réelle. Les difficultés se posent dans la sphère financière suite à l’insuffisance des données, d’où la construction des variables macro prudentielles se restreint. Les variables financières expliquant l’instabilité financière sont la croissance excessive du crédit et le cycle du crédit.

Compte tenu des difficultés des données financières, nous utilisons comme proxy du fonds propres le ratio des réserves liquides/actif des banques en pourcentage, la variable cyclique de ce ratio sera utilisée pour capter le coussin de fonds propres contra cyclique comme variable macro prudentielle. Le coefficient de réserve obligatoire en monnaie locale (CDF) et en devise étrangère (USD) est utilisé ici comme l’indicateur par excellence macro prudentielle.

Le crédit intérieur au secteur privé est très faible (6,2% du PIB en 2014), (graphique1). En comparant par rapport au critère de profondeur financier, le système financier congolais est en démarrage financier (très jeune et peu profond) (Pinshi, 2016)16.

Graphique 1: Credit interieur fourni au secteur prive (% du PIB)

16 Pour une analyse plus détaillée de critère de profondeur financier et du profil du système financier congolais, voir Pinshi (2016).
La corrélation positive entre le crédit et la croissance du PIB reste passive. Le lien entre le système financier et l’économie réelle est faible en RDC. Mais cela ne veut pas dire que le système financier n’a pas un poids systémique sur l’économie réelle, puisque l’analyse de la corrélation n’est que présomptive.

Pinshi (2016) montre que le système financier congolais n’est pas faiblement corrélé avec l’économie réelle. À l’aide d’une analyse dynamique de l’économétrie, il trouve que le système financier congolais a un poids systémique sur l’économie réelle. Ceci implique qu’un choc du système financier peut devenir systémique et causer des effets dévastateurs à la sphère réelle.

À travers l’analyse de Pinshi (2016), nous pouvons dire que le degré de corrélation entre le système financier et l’économie réelle en RDC est important.

La corrélation entre le coussin de fond propre contra cyclique et la croissance du crédit est positive et très active (graphique 3). Ce coussin permet de modérer la croissance excessive du crédit. Ce coussin contra cyclique peut restreindre activement la croissance du crédit s’il tend à déborder sa borne ou son seuil du risque de dysfonctionnement du système financier (crise financière). Nous verrons au quatrième point ce seuil du risque de la crise.

Graphique 2: Relation entre la croissance du PIB et la croissance du crédit intérieur fourni au secteur privé

Graphique 3: Relation entre la coussin contracyclique et la croissance du crédit

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17 Ça représente aussi le lien entre l’activité économique et le système financier.

18 Le cycle de ratio de réserve liquide/actif des banques est utilisé comme proxy du coussin contra cyclique.
c) **Causalité entre la politique macro prudentielle et la stabilité financière**

Sur ce point nous analysons l’effet de la politique macro prudentielle sur la stabilité financière. La technique de la causalité au sens de granger est très utile pour son caractère préventif à mesurer l’effet de la politique macro prudentielle sur la stabilité financière. Les variables macro prudentielles sont les coefficients de réserve obligatoire en franc congolais et en dollar et le coussin de fond propre contra cyclique. Les variables mesurant la stabilité / l’instabilité financière sont le cycle du crédit et la croissance du crédit. Nous utilisons les données mensuelles allant de 2007 à 2014, Ce sont des données annuelles désagrégées mensuellement.

Nous dirons que la mise en place d’une politique macro prudentielle pourrait bien atteindre son objectif de stabilité financière si les coefficients de réserve obligatoire et le coussin de fonds propres contra cyclique causent le cycle du crédit et la croissance du crédit.

Les résultats des tests montrent que le coussin de fond propre contra cyclique cause le cycle de crédit et la croissance du crédit, ce qui, à la lumière des tests de causalité peut être interprété comme une justification d’adopter un cadre macro prudentiel qui surveillera et réalisera la stabilité financière.

Les coefficients de réserve obligatoire cause le coussin de fond propre contra cyclique et la croissance du crédit, ceci indique l’excellence de cet indicateur à influencer directement le coussin de fond propre, le cycle de crédit et la croissance du crédit.

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19 Il faut noter que la causalité au sens de granger est purement statistique et s’interprète avec prudence. La variable x cause y si la prévision de y fondée sur la connaissance passée conjointe de x et de y est meilleure que la prévision fondée sur la seule connaissance du passé de y (Lardic et Mignon, 2002).

20 Il ne faut oublier que le roi dollar reste la monnaie dominante du système financier congolais et on doit impérativement prendre en compte non seulement du coefficient en franc congolais mais aussi en dollar.

21 Le ratio des réserves liquides/actif des banques nous a servi à une approximation du coussin de fond propre. En utilisant le filtre de Hodrick et Prescott le coussin de fond propre contra cyclique a été tiré.
d) **Seuil de la crise financière congolais et opportunité d’octroi de crédit sans risque**

La littérature nous dit que la crise financière a souvent été précédée d’une croissance excessive de crédit. En RDC il y a une passivité d’octroi des crédits, le système financier congolais est stable (cf. graphique 5), la volatilité du cycle de crédit permet de mesurer la stabilité du système financier. Une forte volatilité cyclique du crédit indique une instabilité financière et contrairement, une faible volatilité indique une stabilité financière.

Nous remarquons qu’il y a une faible volatilité de crédit, d’où la condition de la stabilité est vérifiée.

Mais la question est de savoir pourquoi les banques octroient passivement des crédits, cela freine l’activité et surtout des petites entreprises qui ont tendance à demander des crédits pour augmenter leurs productions.

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22 Nom baptisé par l’auteur

23 Il faut reconnaître que la mesure de la stabilité financière est très complexe, une seule variable peut ne pas mesurer la complexité de la stabilité financière. Par exemple l’effet Bonanza peut bien nous montrer une grande vulnérabilité du système financier congolais (Pinshi, 2016).
Certes la croissance du crédit peut avoir un effet négatif sur le système financier et déclencher une crise, la question est de savoir à quel seuil le crédit peut-il être un risque de crise financière.

La méthodologie adaptée est de trouver le niveau du crédit tendanciel dérivé d’un simple filtrage de Hodrick et Prescott. Puis nous calculons l’écart à la tendance pour saisir le cycle du crédit. Enfin, Le seuil est construit pour détecter le risque de crise financière (cf. annexe). Le seuil est de 1,3%.

Un niveau élevé du cycle du crédit par rapport au seuil, est un danger pour l’économie et le système financier dans son ensemble. Cela symboliserait un boom de crédit24. À l’inverse un niveau inférieur est sans danger pour l’économie et le système financier. Ce seuil représente la prise de risque d’une crise financière, le dépassement de ce seuil déclencherait une crise financière. Le crédit en dessous de ce seuil ne posera aucun problème du risque de crise financière.

Les banques doivent octroyer activement les crédits, puisque la situation nous montre que dans l’ensemble, la dynamique du crédit est trop faible par rapport au seuil (graphique 6). Cependant en 2008 et 2009 le système financier a été secoué par les turbulences et les risques des crises financières, ceci est due à la crise financière internationale de 2007-2008. Toutefois, dans l’ensemble il y a un grand écart entre le seuil et le niveau du crédit. Ce grand écart peut être comblé par une croissance de crédit visant à redynamiser le système financier et à améliorer la demande interne.

L’indicateur nous montre que de 2007 en 2014 il y a un assèchement important de crédit, alors que le système n’est pas en danger, au temps mieux octroyer des crédits pour soutenir la demande interne.

Du point de vue quantitatif les banques ont intérêt à octroyer excessivement des crédits tant que nous serons toujours en dessous du seuil de la crise, cela va approfondir le système financier congolais.
V. Cadre de Gouvernance Macro Prudentielle

Dans cette section nous précisons le mandat clair de la politique macro prudentielle, la proposition sur sa gouvernance en RDC et d’investir en savoir dans ce domaine pour augmenter le capital humain et l’analyse approfondie sur la stabilité financière.

a) Mandat clair de la politique macro prudentielle

Le mandat ou l’objectif de la politique macro prudentielle doit être bien cadré et bien défini de façon claire (cf. tableau 1) l’objectif ultime de la politique macro prudentielle est la stabilité financière. Un objectif plus clair et bien défini est une meilleure condition d’avoir une politique plus efficace. Le tableau 1, a bien illustré de façon claire la politique macro prudentielle.

b) Proposition sur la gouvernance de la politique macro prudentielle en RDC

La mise en place d’un cadre de gouvernance adapté, précisant le gestionnaire ou l’autorité responsable, les stratégies et prises de décisions et la responsabilité de cette autorité, est une condition importante pour opérationnaliser la politique macro prudentielle (knot, 2014).

Les préoccupations se posent sur le gestionnaire ou l’institution en charge de la politique macro prudentielle. Deux questions interviennent, la première, doit-on laisser ce pouvoir à la Banque Centrale du Congo ? Dans cette situation on parle du jeu coopératif entre politique monétaire et macro prudentielle ou d’une approche intégrée. La deuxième, doit-il y avoir une institution prudentielle autonome et/ou indépendante s’occupant uniquement de la stabilité financière ? Dans cette situation nous parlons du jeu non coopératif ou d’une approche séparée.

Voici quelques propositions de la gouvernance de la politique macro prudentielle en RDC:

- En RDC le jeu doit être coopératif : puisque la Banque centrale dans ce domaine est la mieux placée, étant donné, d’une part, qu’elle possède une expérience approfondie des techniques d’analyse et d’action à l’échelle du système financier, et d’autre part, qu’il existe de forts liens réciproques entre lutte contre la procyclicité et conduite de la politique monétaire (BRI, 2010);
- Le jeu doit être coopératif mais flexible²⁵ : Bien qu’il s’agisse d’une coopération, la mission de la politique monétaire reste la stabilité des prix et celle de la politique macro prudentielle la stabilité financière. La Banque Centrale doit créer une direction générale de la stabilité financière autonome, que ça soit au sein du site de la Banque centrale ou en dehors du site, cette direction générale doit être autonome à la politique monétaire et doit poursuivre comme seul objectif la stabilité financière. Cependant la Banque Centrale²⁶ doit jouer un rôle important et doit avoir un pouvoir suprême ou un droit de veto sur la politique macro prudentielle ;
- Investir en savoir : en matière de la stabilité financière la RDC est encore à ses débuts, du point de vue analyse et approfondissent. À l’heure actuellement l’analyse de la stabilité financière est au centre des débats, elle est complexe, génératrice des crises et des déséquilibres mondiaux. D’où l’accumulation du capital humain en matière de la

²⁵ Puisqu’il y a aussi le jeu coopératif strict, c’est-à-dire la politique monétaire domine totalement et activement la politique macro prudentielle. À ce moment-là, la politique macro prudentielle est entièrement passive.

²⁶ Nous pouvons dire la politique monétaire pour être plus précis.
stabilité financière reste primordiale. Investissons dans ce domaine pour combler les déficits en savoir sur la stabilité financière et réaliser les excédents pour se prémunir contre le risque et prévenir les crises.

VI. Conclusion

Dans cet article nous avons essayé de définir clairement la stabilité financière et montrer qu’il s’agit bien de la stabilité du système financier (institutions financières, marchés financiers et infrastructures financières). Le manque d’une des composantes du système financier ne remet pas en cause la stabilité financière. Cependant la stabilité financière est menacée par les risques endogènes et exogènes, d’où il faut une régulation saine pour la réduction des risques. La politique macro prudentielle s’avère être une meilleure régulation financière en réduisant le risque systémique.

La politique macro prudentielle a comme objectif final la stabilité financière via la réduction du risque systémique. Le risque systémique se manifeste dans deux dimensions : la dimension temporelle qui traite le problème de la procyclicité du système financier et la dimension transversale qui traite de l’interdépendance et de la corrélation entre les composantes du système financier.

Nous avons essayé d’analyser l’effet de la politique macro prudentielle sur la stabilité financière en République démocratique du Congo. Le coussin de fond propre contra cyclique est fortement corrélé avec la stabilité financière. Cela justifie la mise en œuvre d’un cadre macro prudentiel.

L’analyse de la causalité a mis en lumière cet effet de la politique macro prudentielle sur la stabilité financière en RDC. Le jeu doit être coopératif mais flexible avec la politique monétaire. La stabilité financière est menacée par les risques endogènes et exogènes, d’où il faut une régulation saine pour la réduction des risques. La politique macro prudentielle s’avère être une meilleure régulation financière en réduisant le risque systémique.

Justifie une adoption d’un cadre macro prudentiel en RDC.

Nous avons ensuite montré que la croissance du crédit en RDC est en dessous du seuil de la crise, les banques devront octroyer plus de crédit tant qu’ils sont en dessous du seuil au lieu de le rationner.

Enfin nous avons proposé un meilleur cadre de gouvernance pour une politique macro prudentielle en RDC. Le jeu doit être coopératif mais flexible avec la politique monétaire. C’est-à-dire il doit créer une direction générale ou une institution macro prudentielle autonome, cependant la politique monétaire doit avoir un pouvoir suprême ou un droit de veto sur cette direction générale de la stabilité financière.

VII. Annexes

a) Méthodologie du filtre Hodrick-Prescott


Supposons $X_t$, le ratio du crédit intérieur fourni au secteur privé sur le PIB. Le filtre HP décompose la série en deux éléments : la tendance $X_t^\tau$ et la composante cyclique (stationnaire) ou l’écart à la tendance $X_t^\epsilon$.

\[ X_t = X_t^\tau + X_t^\epsilon \]

À la période $t$ l’économètre peut observer ou avoir l’information de $X_t^\tau$, mais ne peut mesurer ni $X_t^\epsilon$, ni $X_t^\tau$, d’où la méthode de filtre Hodrick-Prescott est utile pour estimer la composante tendancielle en minimisant la variance de $X_t$ par rapport à $X_t^\tau$, de telle sorte que:

\[ \lambda \text{ est un paramètre de lissage. Si } \lambda = 0, X_t^\tau \text{ sera minimisée lorsque } X_t^\tau = X_t^\tau; \text{ si } \lambda = \infty, X_t^\tau \text{ tend vers une tendance linéaire. Ce coefficient est toujours positif et freine les variations de la composante tendancielle.} \]

\[ \min \sum_{t=1}^{T} (X_t - X_t^\tau)^2 + \lambda \sum_{t=2}^{T} [(X_{t+1}^\tau - X_t^\tau) - (X_t^\tau - X_{t-1}^\tau)]^2 \]

\[ X_t^\epsilon = X_t - X_t^\tau \]

b) Seuil de la crise financière

Le seuil ($S^\epsilon$) de la crise est calculé comme un multiple de l’écart type du cycle du crédit :

\[ S^\epsilon = \psi \times \delta^\epsilon \]

\[ \delta^\epsilon = \frac{1}{\sqrt{1 - \frac{\sum_{t=1}^{T}(X_t^\epsilon - \bar{X}_t^\epsilon)^2}} \]

où $\delta^\epsilon$ désigne l’écart-type du cycle du crédit de 2007 à 2014, $\psi$ étant un coefficient choisi arbitrairement. Le FMI utilise cette approche, en fixant le coefficient $\psi$ à 1,75, ce seuil correspondant à une probabilité de 5% que l’écart dépasse le seuil, s’il suit une loi normale.
By definition, we consider that excessive credit growth or a financial crisis risk is identified during the period T (2007-2014), the credit cycle $X_t$ exceeds the level of the crisis threshold $S_t$:

$$X_t > S_t$$

A excessive growth or credit boom is defined as a credit growth that exceeds its long-term trend by 1.75 times the observed standard deviation (Coudert and Pouvelle, 2008).

<table>
<thead>
<tr>
<th>Année</th>
<th>Cycle du crédit (%)</th>
<th>Seuil de la crise financière (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>-0.9</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1.1</td>
<td>1.3</td>
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<td>2010</td>
<td>-0.8</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>-0.7</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

**c) Test de racine unitaire**

The stationarity of the series has been tested using augmented Dickey-Fuller tests. The credit cycle and the counter-cyclical Capital Buffer are cyclical components. We consider them as being stationary.

**d) Test de causalité**

Suppose two variables X and Y. The test of causalité in the sense of Granger (1969) states that X causes Y if the prediction of Y conditioned on the information pertinent to X and Y is better than that conditioned only on the past information of Y. In other words, it would be better to predict Y not only on the past information of Y but also on that of X and Y (pertinent information).

The test implies the estimation of the following two regressions:

$$X_t = \phi_0 + \sum_{i=1}^{p} \phi_i X_{t-i} + \sum_{i=1}^{p} \theta_i Y_{t-i} + \mu_1 t, \quad t = 1, \ldots, T$$

$$Y_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i Y_{t-i} + \sum_{i=1}^{p} \gamma_i X_{t-i} + \mu_2 t$$

Not: (***) significatif à 1%, (**) significatif à 5%

(n) en niveau, (d) en différence première

Nous noterons: CRDCP: croissance de crédit; CDCP: cycle de crédit; DCROCDF et DCDROUSD: coefficient de réserve obligatoire (CDF et USD) en différence première; FPC: coussin de fonds propres contra cyclique.

27 Le cycle du crédit est mesuré par la différence entre le credit au secteur privé et sa tendance. C'est ce que nous appelons « écart à la tendance ». 
L’hypothèse nulle qu’Y ne cause pas X consiste à tester la nullité jointe des paramètres thêta :
\[ H_0 : \theta_1 = \ldots = \theta_p = 0 \]

L’hypothèse nulle que X ne cause pas Y consiste à tester la nullité jointe des paramètres gamma:
\[ H_0 : \gamma_1 = \ldots = \gamma_p = 0 \]

### Résultats des tests de causalité

<table>
<thead>
<tr>
<th>Hypothèse nulle</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>p-value</th>
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<tr>
<td>CRDCP ne cause pas (au sens de granger) CDCP</td>
<td>89</td>
<td>1.48848</td>
<td>0.1935</td>
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<tr>
<td>CRDCP ne cause pas (au sens de granger) CRDCP</td>
<td>89</td>
<td>2.96012</td>
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<tr>
<td>DCROCDF ne cause pas (au sens de granger) CDCP</td>
<td>89</td>
<td>6.71240</td>
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</tr>
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<td>CDCP ne cause pas (au sens de granger) DCROCDF</td>
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<td>0.34964</td>
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<td>6.37986</td>
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Note: 1. E-05 = 1 x 10^{-5} = 0.00001.

**Bibliographie**


and frameworks: update to G20 finance ministers and central bank governors”, février.


Using Event Studies to Evaluate Stock Market Return Performance

By Dr. Alhassan Ndekugri & Dr. Gordana Pesakovic

Allen University

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Keywords: historical data, adjusted stock price, expected return, actual return, volatility.

GJMBR-C Classification: JEL Code: E22
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Chapter One

Introduction

Event studies measure the stock price reaction to an unanticipated announcement of an event, event studies are used to test that market incorporates this new information efficiently and are therefore used to determine the effect of the event on the value of investors (Binder, 1998). Event studies follow a market hypothesis. It holds that financial markets are efficient, as a result, the stock price respond instantly to all available information relating to the profitability of the firm (Fama, 1976). Kumar, Mahadevan, and Gunasekar (2012) investigated the impact of an event on a specific dependent variable. The basic and indispensable assumption followed in the event study methodology is that market is always efficient. Miglani (2011) explored the impact of right shares issued by Indian companies that were placed between 2005 and 2010. The study reveals statistically significant abnormal returns on the announcement and surrounding dates.

Vithessonthi and Techarongrojwong (2013) examined the effect of monetary policy announcement in Thailand. The study revealed the expected change rather than the expected change in interest rates and how it affects stock price. Barunik and Vacha (2013) studied the stock splits’ liquidity analysis of the Warsaw stock exchange and the Vienna stock exchange and found out there was a significant growth in the market liquidity of stock splitting firms over 36 months following the split for both capital markets that is indicative of lower transaction costs for investors.

Bechtel (2009) indicated that a democratic political system had an effect on systematic investment risk. The study objective was to find out a relationship between democratic politics and systematic investment risk. Daily stock data from Germany from 1991 to 2005 suggested the right-wing government (e.g., supporters/acceptors of social hierarchy, free market led to lower investment risk), whereas left leaning governments had the opposite effect. The study discovered that systematic risk decreases if electoral prospects of a rightist government improve, while good prospects for a leftist government increases the systematic risk. Aamir and Shah (2011) undertook a research to understand the impact of dividend announcement for the companies belonging to cement, oil, and gas sectors, listed on the Karachi Stock Exchange (KSE) in Pakistan during the period between 2004 and 2008. A total of 26 dividend announcements were taken using CAAR for the period 21 days prior to the announcement and 31 days after the announcement.

The findings showed that some firms whose abnormal returns were negative on the dividend announcement date became positive immediately after the dividend announcement date. Mahmood, Irfan, Iqbal, Kamran, and Ijaz (2014) investigated the impact of political events on the stock market in Pakistan using event methodology. Their study looked at the Karachi stock exchange change (KSE-100 Index) and concluded that political events do have an influence on the stock market return performance. However, their research never compared the performance of the KSE to the global market, including the S&P 500, which is considered the most referenced world index. Their research focused only on one company that is a Pakistani stock. This research expanded further to look
at multinational companies within and outside of the United States of America.

All research was based on a problem and Chapter One served as an introduction to the problem.

a) Problem Background

Information plays a crucial role in the stock market performance for both companies and investors. As a result, this may have an influence in both directions as a determinant for buy, sell, or hold decisions. Any time there is an inflow of information, a negative or positive result is expected. Information could take the form of an announcement such as dividend payment, company takeover, or election results. This research interest was on election announcements and how they affect stock market return performance of multinational companies.

b) Purpose of the Study

The purpose of this research was to evaluate the stock market performance of Exxon Mobil, Toyota Motors, and Gazprom before and after the announcement of the results of the three historic presidential elections of the United States of America in the 2016, 2008, and 2000 presidential polls.

c) Questions and Hypotheses

i. Research Questions

RQ 1: What is the relationship between election announcement and stock market performance?

RQ 2: Is there a difference between the stock return of multinational companies?

RQ 3: Does the volatility of stock market of multinational companies have any effect on investors?

ii. Null Hypotheses

Ho1 Rational investors will not cause the effect of the event to be reflective in the prices of stocks.

Ho2 There is no a significant difference on stock return before and after the announcement of a presidential results in the United States.

Ho3 There is no difference of volume of stock traded before and after the announcement of the presidential results of the United States.

iii. Alternative or Directional Hypotheses

Ha1 Rational investors would caused the effect of the event to be reflective in the price of stocks.

Ha2 There is a significant difference in stock returns before and after the announcement of the presidential election results in the United States.

Ha3 There is an excessive volume of stock traded before and after the announcement of the presidential results of the United States.

d) Significance of the Study

Understanding the stock market in the 21st century is important for business success. Multinational Companies gets financing for their business by issuing stocks to investors. This research will contribute enormously to academia in terms of understanding the stock market of publicly traded and Multinational companies. This research would also contribute knowledge in understanding the basics of investment, risk analysis by understanding the volatility of stocks and the implication on stock investment, making stock selection for investment, understanding dividends payment. The Capital Asset Pricing Model used in the analysis of abnormal return will also contribute significant in modern day finance, especially in the stock market.

Chapter Two

II. Literature Review

Event study analysis compares the day-to-day percentage change in the market price of a company’s common stock to the return predicted by a stock by a market model that uses the market index, such as the S&P 500 Index or the NASDAQ composite Index (Torchio, 2009). The market model therefore describes the normal relation between the return on the company’s common stock and the return on the market and industry indexes. Stocks of companies, such as Exxon Mobile, Toyota Motors, and Gazprom, were used in this event study.

Mahmood et al. (2014) investigated the impact of political events on the stock market in Pakistan, using the KSE and concluded that political events make the KSE more volatile for a short period (maximum of 10-15 days). Mukhejee and Leblang (2007) investigated the link between diplomat’s policies, rate of interest, and rise and fall in stock prices in the USA and UK. It was observed that investors hope for high interest rates when the Democratic and labor parties are on government benches in the USA and UK, respectively. On the other hand, trading communities anticipate low interest rates when the Republican Party and conservative party are ruling in both the USA and the UK. Huang (1985) and Lobo (1999) investigated the effects of political risk element “elections” on stock returns. It was realized that stock returns were negative in the election year and positive in the preceding years. It was also discovered in the study that stock volatility was very high during the period. As a result, elections were an important source of uncertainty as a political risk factor for the stock market.

Chan and Wei (1996) researched into the effect of political news in Hong Kong on the stock market volatility by using the GARCH model: reliable shares represented by the Hang Seng Index and Chinese shares were represented by the Red-chip Index,
respectively. It was discovered that the volatility of the shares in both indexes increase corresponding to political news. There was the existence of positive relationship between the positive and negative political news and the Hang Seng Index returns, whereas there was not any relationship between political news and the Red-chip Index returns.

Fitzsimons and Sun (2012) investigated the political risk factors of the United Kingdom, Mexico, China, and Iran on the returns and volatility of the market by using the GARCH model. The risk of the relevant countries was identified by the indexes calculated by the International Country Risk Guide (ICRG) and found that the less developed countries were exposed to political risk more than the developed countries.

a) Toyota Motors Company

Toyota Motors manufactures and sells vehicles globally. The company is noted for producing durable cars and believes in quality vehicles for its customers by exceeding the expectation of their customers for a greater smile. The Headquartered of Toyota Motors is in Japan. Toyota Motors has a total of employee strength of 348,877 and has a capital of 635 billion Yen, as of March 31, 2016. The President of Toyota Motors is Akio Toyoda. Toyota Motors operates around the globe, including in Asia, the Americas, Europe, the Middle East, and Africa.

Toyota Motors was chosen from the automobile industry because of the product durability and quality of the vehicles. The oldest Toyota brand still functions in Japan. Toyota Motors has a total of employee strength of 348,877 and has a capital of 635 billion Yen, as of March 31, 2016. The President of Toyota Motors is Akio Toyoda. Toyota Motors operates around the globe, including in Asia, the Americas, Europe, the Middle East, and Africa.

b) Collaborative with Suppliers

Toyota works with suppliers to produce products that win customer’s satisfaction. The company provides open and fair opportunities for entry to any supplier wishing to conduct business with them by taking into consideration quality, cost, technology, delivery reliability, and customer services relationship. On innovation, Toyota aims for the integration of IT services and automobiles. The company is also developing T-connect and G-Link information services that use telematics-based on board information terminals and more expanding efforts overseas into China and the Middle East. As a result of the excellent customer service for its customers, Toyota has seen a great performance in the stock market around the globe, indicating that more and more people are investing in the company.

c) Exxon Corporation

Exxon Mobile Corporation explores and produces crude oil and natural gas in the United States, Canada/South America, Europe, Africa, Asia, and the Middle East. The company was founded in 1870 and is headquartered in Irving, Texas. Exxon Mobil was incorporated in the state of New Jersey in 1882. On November 30, 1999, Mobil became a wholly owned subsidiary of Exxon Corporation, and the enlarged entity changed its name to Exxon Mobil Corporation (Exxon).

d) Brands

Exxon Mobil brands include Esso, Exxon, and Mobil. The company has a broad portfolio of petrochemical product brand and service solutions. These products play a key role in enabling the manufacture of affordable sustainable and safe products that are helping meet the growing demands of an increasing population. Reliable commercial economic supplies of natural gas and power has become fundamental to the world’s economic growth. Exxon Mobil employs a worldwide team of commercial experts to maximize the value of the company’s natural gas and power interests.

e) Gazprom Corporation

Gazprom (2017) is a global energy company focused on geological exploration, production, transportation, storage, processing and sales of gas, gas condensate and oil, sales of gas as a vehicle fuel, as well as generation and market of heat and electric power. The company’s strategic goal is to establish itself as a leader among global energy companies by diversifying sales market, ensuring reliable supplies, improving operating efficiency and fulfilling its scientific and technological potential. Gazprom holds the world’s largest natural gas reserve. The company’s share in the global and Russian gas reserves amount to 17 and 72%, respectively (Gazprom, 2017). Gazprom is a reliable supplier of gas to Russian and foreign consumers. The company owns the world’s largest gas transmission system with a total length of 171.2 thousand kilometers. Gazprom sells more than half of its gas to Russian consumers and exports gas to more than 30 countries. Gazprom is among Russia’s top four oil producers and ranks number one in the world in terms of thermal energy generation (Gazprom, 2017).

According to the security and exchange commission (SEC), stocks are defined as a type of security that gives a stockholder a share of ownership in a company. Stocks are also called equities. The equities market is a place for buying and selling of stocks between companies and investors. As noted by the SEC, common and preferred stocks can be grouped into one or more of the following:
1. Growth stocks: These stocks have earnings growing at a faster rate than market average. These stocks do not often pay dividends and investors buy them with the hope of capital appreciation for them to make more money.

2. Income stocks: These stocks pay dividends consistently and investors buy them for the income they generate.

3. Value stocks: These stocks have low price to earnings (PE) ratio. This means they are cheaper to buy than stocks with a higher PE ratio. Value stocks may either be growth stocks or income stocks. As a result, their low PE ratio may reflect the fact that they have fallen out of favor with investors. People therefore buy value stocks with the hope the market has overreacted and the stock price will rebound.

4. Blue-chips: These stocks are shares in large, well-known companies with a solid history of growth and they generally pay dividends.

f) Why Companies Issue Shares

As noted by the SEC, most companies issue share for the following reasons:

1. Pay off debt: As companies’ issues stocks, they get money to be able to pay off their debt. For this reason, companies are able to keep up with suppliers, creditors, and bondholders.

2. Launching a new product: Many companies who intend to launch a new product or introducing a new business line can also issue shares to get money to carry the intended plan.

3. Expanding into the new market or regions: Most companies that operate in a city or country may want to expand their market into other cities, countries, or regions. To do so successfully, these companies can issue shares to enable them to gather enough money for this expansion.

4. Capital appreciation: occurs when a stock rises in price and investors sell these stocks to make profit, thereby earning a good return on investment.

5. Dividend payment: comes when the company distributes some of its earning to stockholders and dividend payments take the form of cash or stock payment. Cash payment is when the company pays its stockholders in cash. In this case, the money is taken out of the company. On the other hand, when stock payment is made by a company, the stockholders reinvest these stocks into the company for it growth.

6. Ability to vote and influence the company: Common stockholders have voting rights where they vote to elect board of directors who also hire senior management to run the company. Preferred stock holders do not have voting right.

g) Dividend Policy

Corporate dividend policy includes that of cash dividend and stock. Research indicates stock dividends will neither decrease the free cash flow of a corporation nor change the equity structure. It only processes financial transactions, as well as distributes pro rata to shareholders’ existing holdings. Wei and Xiao (2009) discovered that during the period between 1993 and 2006, 34% of Chinese listed companies issued stock dividends. Cheng, Fung, and Leung (2009; Anderson, Chi, Ing-aram, & Liang, 2011; Nguyen & Wang, 2013) also discovered that stock dividend policy can provide excess of stocks. Chen et al. (2014) examined the preferences of Chinese individuals and institutional investors to stock dividends. After controlling the firm size and market performance, they realized the higher the ratio of stock dividends is, the more likely institutional investors will increase their overall holdings of the stock-dividend firm in the week after annual report.

Coulton and Ruddock (2011) found that dividend paying firms in Australia tend to be larger compared to non-dividend paying firms. Firm size may also act as a proxy for the degree of information available compared to smaller firms. Coulton and Ruddock (2011) discovered that dividend-paying firms in Australia are profitable as compared to non-dividend paying firms. This was re-echoed by the corporate life cycle theory that stated that matured firms pay dividends as compared to start up or growing firms.

On the other hand, any time cash dividends are paid, investors take their money out of the corporation. In China, cash dividends are immediately taxable to shareholders as income, while stock dividends are not taxable. In the absence of cash dividend payments, shareholders must sell shares to extract their ratable portion of accumulated firm wealth in the form of capital gains. There is no capital gains tax in China. As a result, stock dividends may provide a convenient-vehicle for managing capital gains’ extraction for individual shareholders, also known as the tax clientele theory.

h) Stock Market Volatility

Uncertainties exist in the investment of stocks globally. These uncertainties may have an effect on the return to the investor. For instance, Agarwal (2014) indicated that exchange rate can affect stock prices for both multinational and domestic firms.

Exchange rate looks at trading between two or more currencies that may result in change in value of foreign operations reflected in profitability in the income statement of firms. As a result, a country that devalues its currency may have a repercussion on export firms (Agarwal, 2014). Fang and Miller (2002) discovered there was an effect of daily currency depreciation on Korean stock returns, which resulted in a bidirectional causality between the Korean foreign currency market
and the Korean stock market. Showing the level of exchange rate depreciation negatively affects stock market returns.

Dowling and Muthusamy (2005) examined the properties of the Australian implied volatility index (AVIX) in the form of seasonality and the information content of AVIX as a predictor of future volatility. The results indicated there was a strong seasonality between the AVIX and stock returns. Yang and Liu (2012), on the other hand, analyzed the forecasting power of TVIX as the predictor of future volatility index for the Taiwan stock market. The outcome showed the volatility index is a strong indicator of future markets. Kozyra and Lento (2011) studied the trading signal based on implied volatility levels and suggested that VIX level provides large amounts of profit, indicating that a relationship holds among the level of expected volatility and profitability.

**Chapter Three**

**III. Methodology**

**a) Sample or Setting**

This research used online resources, such as Google Search, to gather data. Three multinational companies were selected at random: Exxon Mobil from the United States of America, Gazprom from Russia, and Toyota Motors from Japan. While Toyota Motors is in the automotive industry, both Exxon Mobil and Gazprom are both in the oil and gas industry.

**b) Research Design**

A quantitative method was used to carry out this research with data collected using the information on Exxon Mobile, Toyota Motors, and Gazprom, which are all multinational companies. These three companies stock performance information was obtained using Yahoo Finance. The event study estimates abnormal returns at and around the time the event occurred. A test of statistical significance (t-test) was applied to the adjusted stock price to determine if the event had an effect on the firm’s share price (Toyota Motors, Exxon Mobil, and Gazprom) independent of the industry such as the S&P 500 or sector wide share price behavior. The researcher assumed that individual stock returns of Toyota Motors, Exxon Mobil, and Gazprom can be predicted to some degree. A Capital Asset Pricing Model was used to determine the abnormal return of the three companies compared to the S&P 500.

**Capital Asset Pricing Model (CAPM)**

\[ R_e = R_f + \beta (R_m - R_f) \]  \hspace{1cm} (1)

Where \( R_e \) is the expected return of stock, \( R_f \) is the risk free rate, \( \beta \) is beta, and \( R_m \) is the market rate.

**Abnormal Return = Actual Return - Expected Return**  \hspace{1cm} (2)

c) **The Events Studied**

This study investigated the stock market performance using three significant events that took place in the United States. The 2000 election that was contested between then vice president Al Gore and the Republican counterpart, George W. Bush, the son of the former president, George H.W. Bush, with George W. Bush winning the election.

This event took place on the 7th of November, 2000. The 2008 election witnessed the first Black president. This event took place on the 4th of November, 2008. The election was contested between Barack Obama representing the Democratic Party and John McCain representing the Republican Party.

On November 8, 2016, the United States voted to elect its 45th President, Donald John Trump, a Republican nominee being elected as the President of the United States of America for a four (4) year term. The keenly contested election was between Hillary Diane Rodham Clinton and Donald John Trump. During the political campaign period, information on the daily performance on any of the candidates had an influence on the stock market, including the S&P 500 and Dow Jones Industrial average, which are the stock market index and served standard measure for stock market performance.

d) **Data Collection and Analysis**

A monthly historical stock market data of Exxon Mobil, Toyota Motors, and Gazprom were collected using Yahoo Finance. The researcher gathered data samples based on 30 days before the election announcement and 30 days after the announcement of election results of the three Presidential elections. The data were analyzed using SPSS and Excel software. The hypothesis of this research was tested based on the data available on the three historical events on the three multinational companies. The stock returns of the three multinational companies were compared to that of the returns of the industry S&P 500 index.

e) **Methodological Assumptions**

Leedy and Ormrod (2010) posited, “Assumptions are so basic that without them, the research problem itself could not exist” (p. 62). Assumptions should be justified as being “probably” true otherwise the study cannot progress. In this research, the researcher assumed that data collected using electronic records through Yahoo Finance for the three multinational companies were reliable for the analysis to determine the stock market return performance.

f) **Limitations**

Limitations are potential weaknesses in a research that are out of the control of the researcher. In this research, the limitation was that Gazprom's data were only available for 2016 and 2008 and data for 2000.
year were unavailable or could not be obtained. However, data for Exxon Mobil and Toyota Motors are available for all the three significant events. For this reason, there was a partial analysis for the 2000 year while a full analysis occurred for 2016 and 2008. Data from Internet sources may have been compromised, as a result, this also served as a limitation in this research. Different data sets, such as 63, 64, and 65 of dissimilar industries, were used.

g) Delimitations

Delimitations are characteristics that limit the scope and define the boundaries of a study. Therefore, delimitations were under the control of the researcher. These included research questions, research objectives, and variables of interest. In this research, the delimitations were that data from the three multinational companies were obtained using electronic records which the researcher had the firms believe that this helped to simplify work in terms of travel and interviewing to collect data.

Chapter Four

IV. Results

Data analysis in this chapter consisted of two parts. The t-test where the absolute value of the t-statistics of the three companies were Exxon Mobil, Toyota Motors, and Gazprom, was compared with the Z-value of 1.96 and the analysis for the abnormal stock return analysis where the expected return, abnormal, and the return of the market index (S&P 500) was compared for the three election years (2016, 2008, and 2000).

2016 Analysis of Stock Market Performance

\[ V_2 = \text{stock value for Exxon Mobil} \]
\[ V_3 = \text{stock value for Toyota Motors} \]
\[ V_4 = \text{stock value for Gazprom} \]
\[ V_5 = \text{stock value for S&P 500} \]

Table 1: Year 2016 Volatility Analysis

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Table 2: Year 2016 T-Test Analysis

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### 2008 Data Analysis

#### Table 3: Year 2008 Volatility Analysis

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<td>851.43185048</td>
<td>911.46630533</td>
</tr>
</tbody>
</table>

V2 = stock value for Gazprom  
V3 = stock value for Toyota Motors  
V4 = stock value for Exxon Mobil  
V5 = stock value for S&P 500

#### 2000 Data Analysis

#### Table 5: Year 2000 Volatility Analysis

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>V2</td>
<td>64</td>
<td>65.10090452</td>
<td>9.813357808</td>
<td>1.226669726</td>
</tr>
<tr>
<td>V3</td>
<td>64</td>
<td>28.85176923</td>
<td>3.404225128</td>
<td>.425528141</td>
</tr>
<tr>
<td>V4</td>
<td>64</td>
<td>1335.90077781</td>
<td>173.771557591</td>
<td>21.721444699</td>
</tr>
</tbody>
</table>
Table 6: Year 2000 T-Test Analysis

V2 = stock value for TYT
V3 = stock value for Exxon Motors
V4 = stock value for S&P 500

Abnormal Return Estimation
To determine the abnormal return, the Capital Asset Pricing Model was used.

Capital Asset Pricing Model (CAPM) 2016 Year Analysis

\[
R_e = R_f + \beta (R_m - R_f)
\]

Expected Return for TYT Company = 2.09% + 0.67 (11.96% - 2.09%)
Expected Return for TYT Company = 8.7029
Expected Return for Gaz Company = 2.09% + 2.32 (11.96 - 2.09%)
Expected Return for Gaz Company = 24.9884
Expected Return for Exx Company = 2.09% + 0.65 (11.96 - 2.09%)
Expected Return for Exx Company = 8.5055

CAMP Model 2008 Year Analysis

Expected Return for TYT Company = 3.74% + 0.67 (-37% - 3.74%)
Expected Return for TYT Company = -23.556
Expected Return for Gaz Company = 3.74% + 2.32 (-37% - 3.74)
Expected Return for Gaz Company = -90.777
Expected Return for Exx Company = 3.74% + 0.65 (-37% - 3.74%)
Expected Return for Exx Company = -22.741

CAMP Model 2000 Year Analysis

Expected Return for Exx Company = 6.66% + 0.65 (-9.1% - 6.66%)
Expected Return for Exx Company = -3.584
Expected Return for TYT Company = 6.66% + 0.67% (-9.1% - 6.66%)
Expected Return for TYT Company = -3.899
Expected Return for Gaz Company = N/A

Abnormal Return 2016 Year = Actual Return - Expected Return

TYT Company = 3.44 - 8.7029
Abnormal Return = -5.2629
Exx Company = 41.05 - 8.5055
Abnormal Return = 32.5445
Gaz Company = -1.16 - 24.9884
Abnormal Return = -26.1484

Compare with market index (S&P 500) 2016 Year = 5.2%
Abnormal Return 2008 Year = Actual Return - Expected Return

TYT Company = 7.11 - 23.556
Abnormal Return = 30.666
Exx Company = 11.89 - 22.741
Abnormal Return = 34.631
Gaz Company = -2.82 - 90.777
Abnormal Return = 87.957

Compare with market index (S&P 500) 2008 Year = -2.82%

Abnormal Return 2000 Year = Actual Return - Expected Return

TYT Company = -19.3 - 3.899
Abnormal Return = -15.401
Exx Company = -7.91 - 3.584
Abnormal Return = -4.326
Compare with Market index (S&P 500) = -6.99%

Figure 1: 2008 stock return compared.

R2008Ex = Exxon Mobil stock market return
R2008TY = Toyota Motors stock market return
R2008GZ = Gazprom stock market return
**Figure 2:** 2016 stock market return compared.

- **R2016EX** = Exxon Mobil stock market return
- **R2016GZ** = Gazprom stock market return
- **R2016TY** = Toyota Motors stock market return

**Figure 3:** 2000 stock market return compared.

- **R2000TY** = Toyota Motors stock market return
- **R2000EXX** = Exxon Mobil stock market return
- **R2000GZ** = Gazprom stock market return
**Figure 4:** 2016 stock volume traded compared.

- V2016TY = Toyota Motors volume traded
- V2016EX = Exxon Mobil volume traded
- V2016GZ = Gazprom volume traded

*Volume performance compared*

**Figure 5:** 2008 stock volume traded compared.

- V2008EXX = Exxon Mobil volume traded
- V2008GZ = Gazprom volume traded
- V2008TY = Toyota Motors volume traded

*Volume performance compared*
Using Event Studies to Evaluate Stock Market Return Performance

ART = Abnormal return for Toyota Motors
ARE = Abnormal return for Exxon Mobil Company
ARG = Abnormal return for Gazprom Company
ARSP = Abnormal return for S&P 500 (Market index)

a) Data Interpretation

The independent sample t-test compares the means of two independent variables in order to determine whether there is a statistical significance to either accept or reject the null hypothesis. In this research, the adjusted stock values of the three multinational companies, Toyota Motors, Exxon Mobil, and Gazprom during the three historical elections (2000, 2008, and 2016), were analyzed using SPSS software. A t-test was conducted and the absolute values of the three companies (p-values = 0.000, 0.000, and 0.000, and for the year 2000, 2008, and 2016), respectively, which were less than the critical value of 0.05. As a result, the null hypothesis was rejected in favor of alternative hypothesis and concluded:

- Rational investors would cause the effect of the event to be reflective in the prices of stocks.
- There was a difference in the stock return before and after the announcement of the presidential results.
There was a difference of volume of stocks traded before and after the announcement of the presidential results.

A comparative stock return analysis of the three companies on election day was also measured against the market index, that is for the S&P 500, and the results indicated that for November 8, 2016, the return values were Exx = 0.461, TYT = -0.018, Gaz = 0.044, and S&P 500 = 0.011. The previous means that Exx and Gaz outperformed the market index, while TYT was losing to the market index.

For the election held on November 4, 2008, the stock return values of the three multinational companies as compared the market index were: Exx = 0.915, TYT = 0.017, Gaz = 0.088, and S&P 500 = 0.022. Again, the analysis showed that Exx and Gaz were able to outperform the market, while TYT underperformed the market.

For the election held on November 7, 2000, only two multinational companies’ stock returns were analyzed (Exx and TYT). Gaz stock values were unavailable for the 2000 year. The stock returns were: Exx = 0.019, TYT = 0.009, and S&P 500 = -0.016. Here again, Exx and TYT outperformed the market index.

b) Election Year 2016, Volatility Interpretation
The stock market volatility of the three multinational companies were also analyzed and the results showed that for the election held on November 8, 2016, Exx had a volatility = 10.811, TYT = 14.731, Gaz = 0.437, and S&P 500 = 281.229. This indicated that the market index (S&P 500) was highly volatile during the 2016 election year. TYT was also volatile among the three multinational companies. This was followed by Exx, with Gaz being the least in terms of volatility.

c) Election Year 2008 Volatility Interpretation
During the 2008 election, volatility of the three multinational companies results indicated that Exx = 7.791, TYT = 8.919, Gaz =5.356, and the market index, S&P 500 = This means that during the 2008 election year, the market index was again high and among the three multinational companies, TYT was the most volatile, followed by Exx, with Gaz being the least volatile.

d) Election Year 2000 Volatility Interpretation
During the 2000 election, stock market volatility analysis indicated that Exx =3.981, TYT = 9.813, and S&P 500 = 173.772. TYT exhibited a high volatility among the three multinational companies. This was followed by Exx. Stock data for Gaz were unavailable. S&P 500 volatility was the highest. Comparatively, the market index volatility was highest during the 2016 election year with a value of 281.229. The second highest of S&P 500 occurred during the 2000 election, with a value of 173.772, with the 2008 election being the least in terms of S&P 500 volatility, with a value of 121.141.

In terms of volatilities among the three multinational companies, the highest volatility occurred during the 2016 election with TYT having the highest value of 14.731, followed by Exx and then Gaz. The second highest volatility of the three companies occurred during the 2000 election with TYT having the highest volatility value of 9.813. This was followed by Exx with a value of 3.981. Based on the stock returns and volatility analysis of the three historical elections in the United State of America, there is evidence to believe that:
1. There was a relationship between election results’ announcements and stock market return performance.
2. There existed a difference of stock market returns of the three multinational companies.
3. The difference in stock market volatility would have an effect on investors.

e) Abnormal Return Interpretation
Different models exist for the calculation of abnormal return of stocks, such as the Capital Asset Pricing Model, the Mean Adjusted Returns Model, and the Market Adjusted Model. In this research, the abnormal return calculation used the Capital Asset Pricing Model (CAPM) to determine the abnormal returns of the three multinational companies. Abnormal returns could be negative or positive and Beta ($\beta$) plays a role in the final results. Analysis of the results showed the following during the 2016 election announcements: TYT = -5.263%, Exx = 32.545%, Gaz = -148%, and S&P 500 =-5.2%. For the 2008 election announcement, the analysis of results indicated that TYT=30.666%, Exx =34.631%, Gaz = -87.957%, and S&P 500 = -2.82%. During the 2000 election year, the analysis of results showed: TYT = -15.401%, Exx = -4.326, and -6.99%.

V. Conclusions and Discussion
In this research, the conclusion covers two parts, a test of statistical significance using the adjusted stock prices of the three multinational companies and the market index using the S&P 500. These adjusted stock prices spanned from the three historical events of the election announcements following the November 4, 2000, November 7, 2008, and November 8, 2016 elections. The second part of the analysis looked at the abnormal stock market return determination using the same historical events and the same multinational companies applying the Capital Asset Pricing Model (CAPM). Here, the Treasury bill rates of the various historical years were obtained from government treasuries and beta were from the multinational companies obtained from Yahoo Finance daily historical
data. Analysis of the results showed: There was a relationship between election results announcements and stock market return performance.

There existed a difference of stock market returns of the three multinational companies. The differences in stock market volatility would have an effect on investors owed that. Also, the abnormal return analysis proved there exists an abnormal performance of the three multinational from a lowest low of -15.401% during the 2000 election event to a highest low of -26.148% in the 2016 election, to a high of 87.957% in the 2008 election event. This analysis is inconsistent with Mahmood et al.'s (2014) event announcements that stated they do have an effect on the stock market returns.

a) Recommendations

For future studies, the researcher recommends that:
1. Further study involving three decades to be carried out to find out how return and abnormal return patterns occur.
2. This could also be extended to developing economies to find out if major events, like the election announcements, do have any effect on different country's stock markets.
3. Multinational companies of similar industries could be used in the future research to determine the trend in abnormal return.

References


Performance Evaluation of Agricultural Credit of Banks in Bangladesh

By Md. Sazzad Hossain Patwary
Begum Rokeya University

Abstract- The term agriculture is an essential organ of the economy of Bangladesh. In order to ensure long-term food security, a cost-effective, sustainable and environment-friendly agricultural system is very decisive. Agricultural sector plays an irrefutable role in achieving the overall growth and development of the economy of Bangladesh. Agricultural credit plays an inevitable role in agricultural productivity, since it has increased the quantity and quality of inputs used in production process. Timely and adequate flow of agricultural credit is tremendously important for Agricultural productivity. This paper investigates the performance of overall agricultural credit of banks over time; evaluate the performance of agricultural credit of various types of banks in Bangladesh, analyze performance of agricultural credit disbursed to agricultural sub-sector and reveals status of the beneficiaries of agricultural credit. This study collected time series data from various source and analyze in a meaningful way to discover the true performance of agricultural credit of banks in Bangladesh.

Keywords: Bangladesh, agriculture, agricultural credit, scheduled banks.

GJMBR-C Classification: JEL Code: Q01
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Keywords: Bangladesh, agriculture, agricultural credit, scheduled banks.

I. Introduction

The term agriculture is an essential organ of the economy of Bangladesh. Agricultural sector plays an irrefutable role in achieving the overall growth and development of the economy of Bangladesh. The agricultural sector contributes 14.79% of the country’s Gross Domestic Product and 45% of the total labor force directly involved in this sector. This sector also plays vital role in economic growth by providing inputs to agro based industries, creating employment, attracting foreign direct investment. Besides its economic importance this sector notably contributes to important social issues like food and nutrition, standard of living, poverty alleviation etc. Agriculture is a tremendously important sector when viewed from an environmental angle. Through its effect on land and water as well as on air quality and biodiversity it can have a considerable impact on environmental issue.

Agricultural productivity depends upon many factors like fertility of soil, climate, seed quality, fertilizer, irrigation, household characteristics, rural infrastructure, labor efficiency, managerial capability, use of modern technologies etc. Besides above mentioned factors agricultural credit plays an inevitable role in agricultural productivity, since it has increased the quantity and quality of inputs used in production process. In order to ensure long-term agricultural development, the Govt. is trying to establish a purposive, cost-effective; true-user ensured agricultural credit system. Initially the Govt. supplied subsidized agricultural credit through specialized banks like Bangladesh Krishi Bank and Rajshahi Krishi Unnayan Bank. But unfortunately due to inefficiency, corruption, bureaucratic problem, political interference the outcome was not up to the mark at all. Receptively for the last nine years all scheduled private and foreign commercial banks are incorporated under agricultural credit program as a modification of agricultural credit policy by Bangladesh Bank. Although specialized and commercial govt. bank as well as NGO & MFIs have their decentralized branch network system in remote areas throughout the country but private and foreign commercial bank does not have that network. So, they are suggested to distribute credit facility with the affiliation of NGO and MFI. As per the policy modification of central bank, for the last nine years agricultural credit has been disbursed at union parishad office rather than bank to ensure that only genuine farmers can get the facilities.

a) Objective of the study

1. To evaluate overall performance of agricultural credit of banks in Bangladesh.
2. To explore agricultural credit policy adaption by banks of Bangladesh.
3. To identify problems and challenges regarding agricultural credit of banks in Bangladesh.
4. To recommend some suggestions about problems and challenges of agricultural credit.

II. Review of Related Literature

Akther, Younus, Parveen and Chowdhury (2016) in a study found agricultural credit played significant role in reducing rural poverty and thus increased sustainable economic development in Bangladesh. In that study agricultural credit, rural employment, female employment, agricultural production, credit to gross domestic product and per capita income have been used as independent variables to examine the determinants of rural poverty in Bangladesh for the sample period from 1984 to 2014. The empirical estimation suggests that all the explanatory variables in the model are significant and are found to be negatively related to rural poverty.
Rahman, Luo and Cheng (2011) in a study investigate a strong positive correlation between agricultural credit and agricultural productivity. In that study it is found that the performance of agricultural credit of various lenders improved due policy modification including inclusion of new financial intermediaries and modification in loan disbursement methods by Bangladesh Bank. However both the allocation of credit to agriculture and target attainment had found less satisfactory.

Alauddin and Biswas (2014) in a study explore that formal sector has flourished in recent years in disbursing agricultural credit where previously informal sector dominated the rural credit market for agriculture. A timely flow of agricultural credit can meet farmers demand to ensure agricultural productivity. Since NGOs have a stronger network throughout the country thus many local and foreign commercial banks are using these channels to provide agricultural credit.

Sharmeen and Chowdhury (2013) is a study reveal that in the last several years, the growth in the broad agricultural sectors seems steady as well as upward sloping and their contribution in GDP is quite significant. A positive correlation has been found between available agricultural credit and greater production in the context of Bangladesh, whereas, several empirical evidences have been presented here which provide both positive and weak relationship in between them.

Ariful, Rayhan, Mahmudul and Luthful (2014) in a study found that in Bangladesh mainly NCBs and SBs are burdened with heavy classified agricultural loan. Small credits have proven viable to the poor for rural development. Proper application of rural people’s effort, experience and knowledge with the help of timely and adequate flow of agricultural credit can bring prospect to rural areas.

Tanbir Ahmed and Sarahat Salma (2011) in a study state that for efficient performance of agricultural sector, proper credit facilities and adequate support is essential both from government and private sector. It is observed that agricultural banks are able to achieve a steady growth in terms of employees, branches, deposits, loans and advances during the period 2004-2008.

III. Methodology of the Study

This study has been done mainly based on secondary data collected from Bangladesh Bank (BB), Bangladesh Economic Review (BER), and Bangladesh Bureau of Statistics (BBS) publication of various years. Secondary sources of data have been used and analyzed due to availability and accessibility. Besides these data other relevant data have also been collected from Ministry of Finance, Ministry of Agriculture, Ministry of Fisheries, Ministry of Livestock etc. These available sources confirmed data for the year 2001 to 2016. Some cases available data of the year 2017 is also used.

The collected time series data analyzed on the basis of overall agricultural credit performance includes its growth, share to total credit etc. Data also analyzed from the view point of lenders. Agricultural sub-sector also analyzed on the basis of target allocation and attainment. MS Excel software was applied for analyzing and presenting data in a meaningful way.

IV. Analysis and Findings

Table-1: Comparative analysis of target and actual disbursement; recovery; outstanding, overdue and overdue as percentage of outstanding of agricultural credit during 2001-16

<table>
<thead>
<tr>
<th>Year</th>
<th>Disbursement (Target)</th>
<th>Disbursement (Actual)</th>
<th>Gap/Achievement (%)</th>
<th>Recovery</th>
<th>Total Outstanding Loan</th>
<th>Overdue</th>
<th>Overdue as percent of outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>32.66</td>
<td>30.20</td>
<td>92.47</td>
<td>28.78</td>
<td>111.37</td>
<td>67.59</td>
<td>60.69</td>
</tr>
<tr>
<td>2002</td>
<td>33.30</td>
<td>29.60</td>
<td>88.89</td>
<td>32.60</td>
<td>115.00</td>
<td>67.60</td>
<td>58.80</td>
</tr>
<tr>
<td>2003</td>
<td>35.61</td>
<td>32.78</td>
<td>92.05</td>
<td>35.16</td>
<td>119.13</td>
<td>65.26</td>
<td>54.78</td>
</tr>
<tr>
<td>2004</td>
<td>43.79</td>
<td>40.48</td>
<td>92.44</td>
<td>31.35</td>
<td>127.06</td>
<td>62.65</td>
<td>49.31</td>
</tr>
<tr>
<td>2005</td>
<td>55.38</td>
<td>49.57</td>
<td>89.51</td>
<td>31.71</td>
<td>140.40</td>
<td>57.81</td>
<td>41.18</td>
</tr>
<tr>
<td>2006</td>
<td>58.92</td>
<td>54.90</td>
<td>93.18</td>
<td>41.64</td>
<td>153.76</td>
<td>66.50</td>
<td>43.27</td>
</tr>
<tr>
<td>2007</td>
<td>63.51</td>
<td>52.93</td>
<td>83.34</td>
<td>46.76</td>
<td>145.82</td>
<td>66.35</td>
<td>45.50</td>
</tr>
<tr>
<td>2008</td>
<td>69.75</td>
<td>61.67</td>
<td>88.42</td>
<td>43.75</td>
<td>158.49</td>
<td>58.37</td>
<td>36.83</td>
</tr>
<tr>
<td>2009</td>
<td>74.66</td>
<td>69.92</td>
<td>93.65</td>
<td>66.14</td>
<td>171.70</td>
<td>60.49</td>
<td>35.23</td>
</tr>
<tr>
<td>2010</td>
<td>84.53</td>
<td>82.79</td>
<td>97.94</td>
<td>76.51</td>
<td>199.61</td>
<td>63.66</td>
<td>31.89</td>
</tr>
</tbody>
</table>
Generally performance of agricultural credit has been measured based on credit disbursement achievement, recovery situation and overdue as percent of outstanding overtime. In Table-1 we see the comparative analysis of credit disbursement achievement, recovery situation and overdue as percent of outstanding during 2001-16. In this 16 years data we have seen that most disbursement gap found in the year 2007 which is only 83.34 percent of targeted disbursement and most disbursement achievement found in the year 2014 which is 109.90 percent of targeted disbursement. We have also found that before policy modification of agricultural credit average disbursement gap (Year 2001-2007) was 90.27 percent of targeted disbursement and after policy modification of agricultural credit average disbursement achievement (Year 2008-16) stood at 100.19 percent of targeted disbursement.

In 2001 overdue as percent of outstanding was 60.69 percent which is highest during 2001-16. As mentioned earlier agricultural credit initially disbursed through Govt. banks and due to inefficiency & corruption of the employees and bureaucratic problem & political interference in Govt. institutions this performance was very poor. Before policy modification of agricultural credit average overdue as percent of outstanding (Year 2001-2007) was very alarming 50.50 percent and after policy modification of agricultural credit average overdue as percent of outstanding (Year 2008-16) stood 25.48 percent. Participation of private commercial and foreign commercial banks, their effective management & strategy as well as establishment of good governance in Govt. banks improving this performance of agricultural credit. In 2016 overdue as percent of outstanding was 16.47 percent which is lowest during 2001-16.

Table-2: Comparative analysis of Banks Total outstanding, agricultural credit disbursement, percentages of agricultural credit from total banks credit and Agricultural Credit Growth during 2001-16

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Bank Credit Outstanding (Tk. in Billions)</th>
<th>Actual Disbursement of Agricultural Credit (Tk. in Billions)</th>
<th>% of Agricultural Credit from Bank Credit (%)</th>
<th>Agricultural Credit Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>645.53</td>
<td>30.20</td>
<td>4.68</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>732.60</td>
<td>29.60</td>
<td>4.04</td>
<td>-1.99</td>
</tr>
<tr>
<td>2003</td>
<td>832.60</td>
<td>32.78</td>
<td>3.94</td>
<td>10.74</td>
</tr>
<tr>
<td>2004</td>
<td>974.50</td>
<td>40.48</td>
<td>4.15</td>
<td>23.49</td>
</tr>
<tr>
<td>2005</td>
<td>1197.66</td>
<td>49.57</td>
<td>4.14</td>
<td>22.46</td>
</tr>
<tr>
<td>2006</td>
<td>1439.56</td>
<td>54.90</td>
<td>3.81</td>
<td>10.75</td>
</tr>
<tr>
<td>2007</td>
<td>1651.19</td>
<td>52.93</td>
<td>3.21</td>
<td>-3.59</td>
</tr>
<tr>
<td>2008</td>
<td>1966.40</td>
<td>61.67</td>
<td>3.14</td>
<td>16.51</td>
</tr>
<tr>
<td>2009</td>
<td>2259.34</td>
<td>69.92</td>
<td>3.09</td>
<td>13.38</td>
</tr>
<tr>
<td>2010</td>
<td>2782.50</td>
<td>82.79</td>
<td>2.98</td>
<td>18.41</td>
</tr>
<tr>
<td>2011</td>
<td>3476.76</td>
<td>92.10</td>
<td>2.65</td>
<td>11.25</td>
</tr>
<tr>
<td>2012</td>
<td>4135.30</td>
<td>131.32</td>
<td>3.18</td>
<td>42.58</td>
</tr>
<tr>
<td>2013</td>
<td>4482.15</td>
<td>146.67</td>
<td>3.27</td>
<td>11.69</td>
</tr>
<tr>
<td>2014</td>
<td>5047.49</td>
<td>160.37</td>
<td>3.18</td>
<td>9.34</td>
</tr>
<tr>
<td>2015</td>
<td>7463.01</td>
<td>159.78</td>
<td>2.14</td>
<td>-0.37</td>
</tr>
<tr>
<td>2016</td>
<td>6654.76</td>
<td>176.46</td>
<td>2.65</td>
<td>10.44</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank Annual Report (2001-2016)
In the following Table-3, we have found the performance of various types of banks in Bangladesh. Performance is measured by overdue as percentage of outstanding. From the table, we see the performance of State owned commercial banks (SCBs) was very alarming at the beginning of the period. 15 years average overdue as percentage of outstanding of SCBs is 47.39%. On the other hand 15 years average overdue as percentage of outstanding of State owned specialized banks (SBs) is 28.54%. As a part of policy modification of agricultural credit, Private commercial banks (PCBs) and Foreign commercial banks (FCBs) have been providing agricultural credit since 2008. 9 years average overdue as percentage of outstanding of PCBs is 3.08% which is very much satisfactory. On the other hand 9 years average overdue as percentage of outstanding of FCBs is only 0.02% which shows extraordinary performance of FCBs.

Table-3: Comparative analysis of Overdue as the percentage of the total outstanding agricultural credit by various banks during 2002-2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Outstanding Agricultural Credit</th>
<th>Overdue</th>
<th>Overdue as % of Outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCBs</td>
<td>SBs</td>
<td>PCBs</td>
</tr>
<tr>
<td>2002</td>
<td>33.46</td>
<td>66.03</td>
<td>-</td>
</tr>
<tr>
<td>2003</td>
<td>34.80</td>
<td>68.96</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>37.5</td>
<td>73.2</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>40.89</td>
<td>81.65</td>
<td>-</td>
</tr>
<tr>
<td>2006</td>
<td>49.69</td>
<td>85.37</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>49.11</td>
<td>85.89</td>
<td>-</td>
</tr>
<tr>
<td>2008</td>
<td>49.57</td>
<td>98.92</td>
<td>16.73</td>
</tr>
<tr>
<td>2009</td>
<td>53.19</td>
<td>108.37</td>
<td>18.55</td>
</tr>
<tr>
<td>2010</td>
<td>60.99</td>
<td>128.32</td>
<td>21.08</td>
</tr>
<tr>
<td>2011</td>
<td>64.36</td>
<td>149.37</td>
<td>26.62</td>
</tr>
<tr>
<td>2012</td>
<td>67.56</td>
<td>147.37</td>
<td>42.56</td>
</tr>
<tr>
<td>2013</td>
<td>73.63</td>
<td>174.47</td>
<td>59.78</td>
</tr>
<tr>
<td>2014</td>
<td>79.07</td>
<td>199.42</td>
<td>64.01</td>
</tr>
<tr>
<td>2015</td>
<td>84.04</td>
<td>177.09</td>
<td>66.11</td>
</tr>
<tr>
<td>2016</td>
<td>87.16</td>
<td>175.08</td>
<td>80.24</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank Annual Report (2002-2016)
Figure-1: Performance of various types of banks in Bangladesh. Measured by overdue as percentage of outstanding (plotted in vertical axis) during the year 2002-16 (plotted in horizontal axis)

Table-4: Agricultural Credit Allocation and Target Attainment by Sub Categories (2001-16)

<table>
<thead>
<tr>
<th>Year</th>
<th>Crops Share (%)</th>
<th>Livestock Share (%)</th>
<th>Fisheries Share (%)</th>
<th>Poverty Alleviation Share (%)</th>
<th>Others Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attainment (%)</td>
<td>Attainment (%)</td>
<td>Attainment (%)</td>
<td>Attainment (%)</td>
<td>Attainment (%)</td>
</tr>
<tr>
<td>2001</td>
<td>45.10</td>
<td>2.62</td>
<td>65.83</td>
<td>14.27</td>
<td>35.33</td>
</tr>
<tr>
<td>2002</td>
<td>43.11</td>
<td>3.72</td>
<td>76.92</td>
<td>2.27</td>
<td>15.67</td>
</tr>
<tr>
<td>2003</td>
<td>51.77</td>
<td>4.51</td>
<td>79.57</td>
<td>1.71</td>
<td>8.96</td>
</tr>
<tr>
<td>2004</td>
<td>45.58</td>
<td>6.13</td>
<td>89.21</td>
<td>2.74</td>
<td>9.98</td>
</tr>
<tr>
<td>2005</td>
<td>42.53</td>
<td>5.75</td>
<td>74.22</td>
<td>2.70</td>
<td>13.69</td>
</tr>
<tr>
<td>2006</td>
<td>40.10</td>
<td>5.02</td>
<td>57.74</td>
<td>4.20</td>
<td>27.62</td>
</tr>
<tr>
<td>2007</td>
<td>43.19</td>
<td>5.04</td>
<td>50.00</td>
<td>4.55</td>
<td>23.71</td>
</tr>
<tr>
<td>2008</td>
<td>39.95</td>
<td>4.80</td>
<td>54.11</td>
<td>5.24</td>
<td>27.38</td>
</tr>
<tr>
<td>2009</td>
<td>40.32</td>
<td>4.49</td>
<td>50.65</td>
<td>4.89</td>
<td>30.90</td>
</tr>
<tr>
<td>2010</td>
<td>40.09</td>
<td>4.93</td>
<td>56.20</td>
<td>4.83</td>
<td>32.33</td>
</tr>
<tr>
<td>2011</td>
<td>40.04</td>
<td>4.64</td>
<td>58.17</td>
<td>5.05</td>
<td>17.69</td>
</tr>
<tr>
<td>2012</td>
<td>48.55</td>
<td>5.86</td>
<td>75.50</td>
<td>5.93</td>
<td>11.80</td>
</tr>
<tr>
<td>2013</td>
<td>43.87</td>
<td>12.29</td>
<td>133.06</td>
<td>9.01</td>
<td>11.30</td>
</tr>
<tr>
<td>2014</td>
<td>44.47</td>
<td>12.45</td>
<td>130.80</td>
<td>8.59</td>
<td>11.62</td>
</tr>
<tr>
<td>2015</td>
<td>47.59</td>
<td>12.87</td>
<td>123.17</td>
<td>10.35</td>
<td>9.27</td>
</tr>
<tr>
<td>2016</td>
<td>49.27</td>
<td>14.81</td>
<td>154.31</td>
<td>11.25</td>
<td>8.83</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank Annual Report (2001-2016)

Table-4 represents the percentages of credit allocation/share over total agricultural credit disbursement and target attainment by sub-categories during 2001-2016. In these table agricultural credit performances is analyzed by sub-category levels. Sub-category includes crops, livestock, fisheries, poverty alleviation and others (purchasing irrigation equipments, marketing agricultural products and other agricultural activities).

Crop’s share of agricultural credit had reached maximum level at 51.77% in 2003 while it dropped to a minimum of 39.95% in 2008. 16 years average share of crops over total agricultural credit is 44.13%. Hence, target and actual disbursement of crops credit gradually increased overtime. Before policy modification 7 years average target attainment of this sub-sector was 78.51% and after policy modification 9 years average target attainment of this sub-sector stood 96.15%.

Livestock’s share of agricultural credit had reached maximum level at 14.81% in 2016 while it dropped to a minimum of 2.62% in 2001. 16 years average share of livestock over total agricultural credit is...
6.87%. Before policy modification 7 years average share of this sub-sector over total agricultural credit was 4.68% and after policy modification 9 years average share of this sub-sector over total agricultural credit stood 8.57%. Hence, target and actual disbursement of livestock's credit gradually increased overtime. Before policy modification 7 years average target attainment of this sub-sector was 70.49% and after policy modification 9 years average target attainment of this sub-sector stood 92.86%.

Fishery's share of agricultural credit had reached maximum level at 11.25% in 2016 while it dropped to a minimum of 1.71% in 2003. 16 years average share of fishery over total agricultural credit is 5.37%. Before policy modification 7 years average share of this sub-sector over total agricultural credit was 2.97% and after policy modification 9 years average share of this sub-sector over total agricultural credit stood 7.24%. Hence, target and actual disbursement of fishery's credit gradually increased overtime. Before policy modification 7 years average target attainment of this sub-sector was 61.23% and after policy modification 9 years average target attainment of this sub-sector stood 90.31%.

In case of poverty alleviation share of agricultural credit had reached maximum level at 32.33% in 2010 while it dropped to a minimum of 8.83% in 2016. 16 years average share of poverty alleviation over total agricultural credit is 17.18%. Before policy modification 7 years average target attainment of this sub-sector was 78.51% and after policy modification 9 years average target attainment of this sub-sector stood 96.15%.

Other’s share of agricultural credit had reached maximum level at 35.57% in 2004 while it dropped to a minimum of 15.83% in 2016. 16 years average share of Purchasing irrigation equipments, marketing agricultural products and other agricultural activities over total agricultural credit is 26.43%. Hence, target and actual disbursement in this sub-sector gradually decreases overtime.

Table-5: Comparative statement of no. of total beneficiary of agricultural credit , female beneficiary, % of female beneficiary, amount of agricultural credit disburse to female beneficiary and % of amount disburse to female beneficiary out of total disbursement of agricultural credit during 2011-17

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Total Beneficiary</th>
<th>No. of Female Beneficiary</th>
<th>% of Female Beneficiary</th>
<th>Amount Disburse to Female Beneficiary</th>
<th>Actual Disbursement of Agricultural Credit</th>
<th>% of Amount of Agricultural Credit Disburse to Female Beneficiary out of total Agricultural Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2700408</td>
<td>332334</td>
<td>12.31</td>
<td>7.25</td>
<td>92.10</td>
<td>7.87</td>
</tr>
<tr>
<td>2012</td>
<td>3036144</td>
<td>320428</td>
<td>10.55</td>
<td>7.35</td>
<td>131.32</td>
<td>5.60</td>
</tr>
<tr>
<td>2013</td>
<td>3310024</td>
<td>444546</td>
<td>13.43</td>
<td>12.45</td>
<td>146.67</td>
<td>8.49</td>
</tr>
<tr>
<td>2014</td>
<td>3285936</td>
<td>589942</td>
<td>17.95</td>
<td>16.12</td>
<td>160.37</td>
<td>10.05</td>
</tr>
<tr>
<td>2015</td>
<td>3194950</td>
<td>265562</td>
<td>8.31</td>
<td>9.00</td>
<td>159.78</td>
<td>5.63</td>
</tr>
<tr>
<td>2016</td>
<td>3426130</td>
<td>1519578</td>
<td>44.35</td>
<td>44.80</td>
<td>176.46</td>
<td>25.38</td>
</tr>
<tr>
<td>2017</td>
<td>3856635</td>
<td>1847065</td>
<td>47.89</td>
<td>62.40</td>
<td>209.98</td>
<td>29.71</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank’s Agricultural & Rural Credit Policy and Programme (2011-2017)

Table-5 reveals the women’s participation and share on agricultural credit during 2011-2017. From this table we observed that no. of beneficiary of agricultural credit increases over time. Percentage of no. of women had reached maximum level at 47.89% in 2017 while it dropped to a minimum of 8.31% in 2015. Encouragingly for the last two years this rate is 47.89 and 44.35% which is more than twice of its average rate 22.11%.

Amount of agricultural credit disburse to women is also increases over time. But their share on amount of agricultural credit disbursement is not at a rate of their participation rate. That is in 2017, out of every 100 beneficiaries of agricultural credit 48 are female but out of every 100 taka disbursement they got only 29.71 taka. Same type of situation exists during 2011-16 as well. This situation reveals that there is discrimination in per head credit disbursement between male and female beneficiary.

V. MAJOR CHALLENGES OF AGRICULTURAL CREDIT

- The first and foremost challenge of agricultural credit is to ensure its use and user properly. Many times instead of true user other people got the agricultural credit and use it in other purpose. Sometimes true user also misuses this loan to repay paternal debt., marriage, education, medical expenses etc.
- Sometimes it takes too time and formalities to process agricultural credit. Farmers always feel fear about formalities and documentation of financial institutions. This lengthy procedure sometimes...
hampers the productivity of farmers as they incapable to purchase agricultural inputs on time.

- Financial institutions in Bangladesh are mostly urban biased. For balanced sector wise and regional development decentralized financial institutions are very much needed. This urban bias baking operation is a major threat of agricultural credit.

- Unfavorable interest rate, repayment procedure and terms and conditions of some financial institutions restrain agricultural credit. PCBs and FCBs having limited banking operation in rural areas and provide agricultural credit through NGO-MFIs which is very costly to farmers. Weekly repayment procedure pattern of NGO-MFIs is also not suitable for agricultural sector.

- Lack of collateral by the farmers, formalities & fear regarding collateral submission most farmers lost their intention to receive the loan as most of them are illiterate.

- Political interference is acts as a major obstacle for agricultural credit. Sometimes loans are processed on the basis of political influence and sometimes agricultural loan used in political affairs as well.

- In Bangladesh agricultural insurance system yet to develop. Agricultural credit performs more if agricultural insurance system will spread and function properly.

- Allocation of agricultural credit as compare to total bank credit is very small. Considering the importance of agricultural sector, agricultural credit has to be increased.

- Credit allocation among sub-sector, livestock and fishery sector are very much neglected. Share on agricultural credit and target attainment is very poor in those sub-sectors.

- Discrimination exists in allocation of agricultural credit between male and female. Per head disbursement of agricultural credit to male beneficiary is much higher than female beneficiary.

- Performance of agricultural credit of NCBs and SBs is very alarming. Though the situation is gradually improving. Despite their performance should be increased to the acceptable level.

VI. Conclusion and Suggestions

In order to ensure long-term food security, a cost-effective, sustainable and environment-friendly agricultural system is very decisive. Being a developing country Bangladesh has to rely on agricultural sector in every respect of economic activities. This crucial importance of agricultural sector guided us to give appropriate care and concentration towards this sector. Evaluating the performance, trends and patterns of agricultural credit over the time the following suggestions are recommended for further potentiality of agricultural credit:

- Banks and financial institutions should ensure the true user of agricultural credit and make sure they use the credit for true purpose. Close supervision and monitoring of the officials can improve this situation.

- Though Bangladesh Bank time to time make policies and program regarding agricultural credit but the flow of agricultural credit is too small in compare to growing need of this sector. So flow of credit should be increased in a meaningful way that ensures both quality and quantity of agricultural credit.

- Among agricultural sub-sectors, allocation of credit and target attainment should be increased in livestock and fishery.

- Financial institution should ensure timely and adequate flow of agricultural credit. For that calendar of agricultural production process should be follow. Unnecessary terms and conditions, loan processing time and documentation formalities should be reduced as much as possible.

- Financial institutions and financial services should spread at the remote and rural areas. Inclusive financing strategy and agent banking system can be a powerful weapon for that.

- Financial institutions particularly state owned financial institutions should be monitored and regulated strictly. For that accountability and responsibility should be ensure within the stakeholders.

- Financial institutions especially state owned financial institutions should be free from political interference. Zero tolerance policy should be taken for any sort of corruption and irregularities. Honest and efficient person should be place as policy maker.

- Discrimination on credit disbursement between male and female should be reduced. Special importance should be provided to women farmers. Proper training and awareness program should also be established.

- Group lending, crop diversification, formation of cooperatives should be encouraged to ensure the best outcome of agricultural credit and to ensure the protection of farmers from any unfortunate circumstances.

- The farmers willing for taking agricultural loan from financial institutions must be brought under insurance coverage. For that an effective agricultural insurance system should be developed with the joint collaboration of Bangladesh Bank and Insurance Development and Regulatory Authority.
Performance Evaluation of Agricultural Credit of Banks in Bangladesh

References


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   (II) Choose corresponding Journal.

   (III) Click ‘Submit Manuscript’. Fill required information and Upload the paper.

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

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Author Guidelines:

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript’s Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

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Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer’s interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.
Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
  - Submit to generally acknowledged facts and main beliefs in present tense.
THE ADMINISTRATION RULES

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- Do not give permission to anyone else to “PROOFREAD” your manuscript.

- Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.

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