

HETERODOXUS

Revista Economicus Heterodoxus

Programa de Economía

Año: 4

No. 1

Primer Semestre 2015

ISSN: 2256-2508



Universidad
Piloto de Colombia
UN ESPACIO PARA LA EVOLUCIÓN

UNIVERSIDAD PILOTO DE COLOMBIA

Presidente
José María Cifuentes Páez
Rectora
Patricia Piedrahita Castillo
Director General de publicaciones
Rodrigo Lobo-Guerrero Sarmiento
Coordinador General de publicaciones
Diego Ramírez Bernal
Decano del programa de Economía
Juan Alejandro Barreto Tejada

REVISTA ECONOMICUS HETERODOXUS ©



OPEN ACCES

La revista Economicus Heterodoxus es editada por el
Programa de Economía de la Universidad Piloto de Colombia

ISSN

2256-2508

Dirección General

Juan Alejandro Barreto T.

Editor

Oscar Javier Martínez Herrera

Universidad Piloto de Colombia /

Programa de Economía

Carrera 9 No. 45A - 44 Bogotá (Colombia)

Teléfono

(011-571) 332 2900, ext. 295

Correo electrónico

economicus-heterodoxus@unipiloto.edu.co

COMITÉ EDITORIAL

Editorial Board

Rodrigo Lobo Guerrero
Juan Alejandro Barreto T.
Miguel Ricardo Landinez
Astrid Caro Ramírez
Oscar Javier Martínez Herrera
Maria Ines Barbosa
Jaime Vergara Hincapié
Flor María Rojas Beltrán
Sandra Marlene Rojas

COMITÉ CIENTÍFICO

Scientific Board

Joaquín Flores Paredes
PhD en Economía Internacional y Desarrollo
Universidad Nacional Autónoma de México –
UNAM

Fernando Jordan Flórez
PhD en Sociología y PhD en Jurídica e Instituciones Políticas de la Universidad Externado de Colombia
Especialista en Telecomunicaciones de la Universidad Piloto de Colombia
Abogado de la Universidad de los Andes

Fernando Giraldo García
Pregrado en Ciencias Política de la Universitario Iheal Paris III
PhD. En Ciencia Política de la Universite De Paris Iii (Sorbonne-Nouvelle)
Magister en Ciencias Políticas Sociedades Latinoamericanas de la Universite De Paris Ii

PARES EVALUADORES

Peer Reviewers

Melba Rubiano Briñez
Magíster en Planeamiento Urbano y Regional del Instituto de Pesquisa
Magister en Planeamiento Urbano y Regional de la Universidad Federal de Río de Janeiro
Economista de la Universidad La Gran Colombia

Irma Beatriz Baquero Haeberlin
PhD en Economía Rural de la Universidad Federal de Vicos-Brasil
Magíster en Economía Agrícola de la Universidad de Winconsin-Madison
Economista de la Universidad de los Andes

Alvaro Andrés Vernazza Páez

PhD en Economía Universidad De La Coruña
-España
Maestría En Ciencias Económicas de la Universidad Santo Tomás de Aquino
Maestría en Banca y finanzas de la Universidad De La Coruña – España
Economista de la Universidad Santo Tomás

No.2

Julian A. Bucheli Hurtado

Economista Abogado. PhD © en Economía y Negocios. Magister en Planeación Socio Económica. Especialista en Derecho Administrativo.

COLABORADORES PERMANENTES

Permanent Partners

Grupo Economía, Poder y Territorio
Grupo Gestión Urbana
Línea Economía Poder y Territorio

DOCENTES

Teachers

Miguel Ricardo Landinez León
Flor María Rojas Beltrán
Oscar Javier Martínez Herrera
Juan Pablo Fernandez García
Astrid Caro Ramírez
Maria Ines Barbosa
Jaime Vergara Hincapié
Julian Buchelli Hurtado

DISEÑO Y DIAGRAMACIÓN

Design and Layout

Daniela Martínez Díaz

Pilar Álvarez Molina

Departamento de Publicaciones y Comunicación,
Diseñadora Gráfica, UPC

CORRECCIÓN DE ESTILO Y TRADUCCIÓN

Proofreading and Translation

El Amanuense Estilo

FOTO DE PORTADA

Fotografías tomadas de www.freepick.com y www.freeimages.com
recuperadas el 10 de Febrero de 2016

Pag. 3

Cra. 9 No. 45 A 44

Dirección de investigaciones – Bogotá, Colombia

Código postal: 110311

Teléfonos: (011-571) 332 2900 Ext. 377



9 ARTÍCULOS

67 INSTRUCCIONES
PARA LOS AUTORES

6 EDITORIAL

TABLA DE CONTENIDO

Pág. 6	EDITORIAL
Pág. 9	ARTÍCULOS
Pág. 9	<i>In memoriam</i> Estanislao Zuleta Jaime Vergara Hincapié y Astrid Caro RamírezT
Pág. 17	Reseña: ¿Por qué fracasan los países? Leonardo Santana Viloria
Pág. 20	Finding empirical evidence of exchange rate intervention by forwards manipulation of Swiss Central Bank Eur/Chf Carlos Eduardo Yepes Contreras
Pág. 67	INSTRUCCIONES PARA LOS AUTORES

EDITORIAL

EDITORIAL

OSCAR JAVIER MARTÍNEZ HERRERA

COORDINADOR DE PUBLICACIONES DE ECONOMÍA
EDITOR PUBLICACIONES PROGRAMA DE ECONOMÍA

Esta primera edición de la revista Economicus Heterodoxus del año 2015, muestra diversas temáticas que los investigadores del programa de economía de la Universidad Piloto de Colombia y los profesores colaboradores externos, aportaron a esta edición especial. En esta oportunidad se destaca el “in Memoriam” en honor a Estanislao Zuleta, cuyo pensamiento después de 25 años de su muerte aún perdura. También se tiene en cuenta la

bibliografía temática del eje turismo y sociedad, del proyecto de investigación interdisciplinario “Modelo Alternativo de Inclusión e Innovación Productiva: Construcción Social en Viotá”, y una reseña del libro ¿Por qué fracasan los países? de Daron Acemoglu y James Robinson Por último, se presentará el enfoque de la macroeconomía internacional acerca del mecanismo intervención de la tasa de cambio suiza que realizó el Banco Central Suizo mediante el uso de forwards.

En el *primer artículo*, los profesores Jaime Vergara Hincapié y Astrid Caro Ramírez rescatan parte de la memoria y vida académica de Estanislao Zuleta, quien fue profesor de varias instituciones de educación superior y dejó grandes aportes al conocimiento y a la reflexión: Este “*in Memoriam*” es resultado del conversatorio *Pensamiento de Estanislao Zuleta, la paz y el momento político que vive Colombia*. realizado el pasado 19 de febrero de 2015. En este artículo, también se presenta una bibliografía temática del proyecto investigación “*Modelo Alternativo de Inclusión e Innovación Productiva: Construcción Social en Viotá*”, eje turismo y sociedad, realizado por los profesores de economía Oscar Javier Martínez y Julián Buchelli. Posteriormente, Leonardo Santana Viloria, profesor asociado de la Universidad Jorge Tadeo Lozano, presenta

una reseña del libro *¿Por qué fracasan los países?* de Daron Acemoglu, y James Robinson, una revisión crítica del modelo de sociedad extractiva e inclusiva que presentan las economías subdesarrolladas que, aunque parezcan similares entre sí, presentan diferencias desde sus orígenes institucionales, dado que el crecimiento económico basado únicamente en la explotación no puede ser sostenible en el tiempo y no está diseñado para crear las bases para el futuro entendiendo por esto una ambición mayor al corto plazo. Por último, Carlos Yepes trata de dar una explicación teórica y empírica de por qué los cambios en la tasa de cambio suiza no se ven explicados por la intervención del Banco Central Suizo, sino por factores ajenos o exógenos al mecanismo, esto teniendo presente que Suiza no hace parte de la Comunidad Europea.

RESEÑA:
17 ¿POR QUÉ FRACASAN LOS PAÍSES?

9 ARTÍCULOS

9

IN MEMORIAM
ESTANISLAO ZULETA

20

FINDING EMPIRICAL EVI-
DENCE OF EXCHANGE RATE
INTERVENTION BY FORWARDS
MANIPULATION OF SWISS
CENTRAL BANK EUR/CHF

Pag. 8

ARTÍCULOS

IN MEMORIAM ESTANISLAO ZULETA

No.1

IN MEMORIAN
ESTANISLAO ZULETA

Jaime Vergara Hincapié*
Astrid Caro Ramírez**

En conmemoración de los 80 años del nacimiento de Estanislao Zuleta y 25 años después de su muerte, un grupo de iniciativas ciudadanas, académicas y de opinión, en compañía del programa de economía de la Universidad Piloto, desarrollaron el pasado 19 de febrero de 2015 el conversatorio “Pensamiento de Estanislao Zuleta, la paz, y el momento político que vive Colombia”. A continuación presentamos a nuestros lectores una breve semblanza de su vida y obra para que la comunidad académica recuerde y no deje perder sus aportes para los debates que actualmente están vigentes y quienes para los que en el futuro enfrentemos como sociedad.

Estanislao Zuleta Velásquez fgeneró aportes importantes al conocimiento y la

reflexión. Su esencia era la de un hombre transparente, humano y soñador. Nació el 3 de febrero de 1935 en Medellín y murió en Cali el 17 de febrero de 1990. Sus abuelos fueron abogados y su padre era un joven intelectual que murió en el mismo avión que transportaba al gran artista Carlos Gardel. Cuando cursaba cuarto de bachillerato en el Liceo de la Universidad de Antioquia, abandonó los estudios y se dedicó a estudiar por su cuenta. Tomar esta decisión fue motivo de incomodidad y preocupación porque, según su familia, abandonó la línea por la cual debía continuar su legado. (estanislaozuleta.com, 2015)

Fernando Isaza fue su tío político y figura paterna, quien tenía una bella finca en el

REVISTA ECONOMICUS HETERO DOXUS

oriente antioqueño, por los alrededores de Guatapé y El Peñol. Era un hombre sereno que creía en la disciplina de Estanislao para estudiar por sí solo y reunió a la familia del joven en su casa y les dijo que le apoyaba en su decisión porque el estudio le quitaba mucho tiempo para sus estudios (Arango, 2010).

En su adolescencia tuvo como modelo y amigo a Fernando González (mejor amigo de su padre), quien lo llevó por el camino de la reflexión, siendo Fernando uno de los pensadores y filósofos más reconocidos del país. Eso lo hizo un hombre diferente y orgulloso de haber abordado la academia fuera del sistema tradicional, fue autodidacta y alumno de maestros como Kant, Freud, Marx, Nietzsche, Dostoyevski y Mann.

Zuleta trabajó en varias instituciones universitarias por largo tiempo como contratista pero no pudo ganar más que un salario simbólico porque no poseía títulos de universidades ni escalafón. Fue catedrático de Filosofía del Derecho e Historia de la Filosofía en la Universidad Libre de Bogotá, en el año 1959; profesor de tiempo completo de la misma universidad desde 1968 a 1969; vice-rector académico de la Universidad Santiago de Cali desde 1969 hasta 1970; profesor de tiempo completo de la Facultad de Ciencias Económicas de la Universidad de Antioquia en Medellín, del año 1970 al 1974; profesor de cátedra magistral de Psicoanálisis,

Arte y Filosofía en el Centro Psicoanalítico Sigmund Freud, en la ciudad de Cali desde 1974 hasta 1977; catedrático de Psicoanálisis y Filosofía de la Universidad del Valle entre el año 1977 y 1981 y de Lógica de la Facultad de Derecho de la Universidad Libre de Cali desde 1977 hasta 1981.

Cuando en la Universidad del Valle tomó posesión como rector Álvaro Escobar Nava, intelectual y demócrata, en conjunto con Elsa Strauss, directora del departamento de psicología, se trató ante el Consejo Superior el otorgamiento del Doctorado Honoris Causa a Estanislao Zuleta el día 15 de septiembre de 1980 (Urrea Henao, 2015).

Su obra es amplia y si se quiere ecléctica (ver tabla 1). En ella se refleja la búsqueda por el conocimiento desinteresado y desprovisto de ataduras pero siempre con un método propio y auténtico que fue perfeccionándose con los años. En los textos de Zuleta, sea cual fuere la temática, se evidencia un ritmo y cadencia que atrapa al lector y lo confronta con sus propias dudas e interrogantes en la búsqueda de una “intimidad” intelectual. Aunque hacer un recuento de sus aportes supera por mucho las pretensiones de este texto, a continuación se resumen algunos de los principales elementos presentados en el conversatorio realizado en el auditorio principal de la Universidad Piloto de Colombia en el que participaron sus algunos familiares, amigos y seguidores.

TABLA 1.
Libros y publicaciones de Estanislao Zuleta.

1963	Comentarios a la “Introducción general a la crítica de la economía política” de Carlos Marx. Editorial Universidad de Antioquia. Medellín.
1967	Conferencias de economía política latinoamericana. Editorial Universidad Libre. Bogotá.
1970	Historia económica de Colombia. Universidad del Tolima. Ibagué.
1973-76	La tierra en Colombia. Editorial Oveja Negra. Bogotá.
1976	Conferencias sobre historia económica de Colombia. Ediciones Tiempo Crítico. Colombia.
1977	Comentarios a la “Introducción general a la crítica de la economía política” de Carlos Marx. Editorial La Carreta. Colombia.

ARTÍCULOS

1977	Lógica y crítica. Facultad de Humanidades, Universidad del Valle. Santiago de Cali.
1977	Conferencias sobre historia económica de Colombia. Ediciones La Carreta. Colombia.
1977-2003	Thomas Mann, la montaña mágica y la llanura prosaica. Colección Autores Nacionales. Biblioteca Colombiana de Cultura. Bogotá.
1978	Teoría de Freud al final de su vida. Editorial Latina. Colombia.
1980	Comentarios a “Así habló Zarathustra” de Nietzsche. Facultad de Humanidades, Universidad del Valle. Santiago de Cali.
1980	El matrimonio, la muerte y la propiedad en Tolstoi. Editorial Nueva Letra. Cali.
1981	Comentarios a “Así habló Zarathustra” de Nietzsche. Editorial La Carreta. Colombia.
1985	El pensamiento psicoanalítico. Colección Espejo. Editorial Percepción. Medellín.
1985	Sobre la idealización en la vida personal y colectiva y otros ensayos. Procultura. Bogotá.
1986	Psicoanálisis y criminología. Editorial Percepción. Colombia.
1986	Arte y Filosofía. Colección Quipus. Editorial Percepción. Medellín.
1987	Ensayos sobre Carlos Marx. Colección Quipus. Editorial Percepción. Medellín.
1988	La poesía de Luis Carlos López. Colección Metáfora. Editorial Percepción. Medellín.
1991	Colombia: violencia, democracia y derechos humanos. Ensayos Letras Cubanias. Altamira Editores. Colombia.
1994-2007	Elogio a la dificultad y otros ensayos. Fundación Estanislao Zuleta. Colombia.
1995	Educación y democracia. Corporación Tercer Milenio. Colombia.
1995	Educación y democracia. Fundación Estanislao Zuleta. Colombia.
1996	Lógica y crítica. Facultad de Humanidades, Universidad del Valle. Santiago de Cali.
1997	Conversaciones con Estanislao Zuleta. Fundación Estanislao Zuleta. Colombia,
2000	Elogio a la dificultad y otros ensayos. Fundación Estanislao Zuleta. Colombia.
2001	Arte y Filosofía. Editorial Hombre Nuevo. Colombia. Colombia.
2001	El Quijote, un nuevo sentido de la aventura. Hombre Nuevo Editores. Colombia.
2004	Psicoanálisis y criminología. Hombre Nuevo Editores. Medellín.

No.2

2004	El pensamiento psicoanalítico. Hombre Nuevo Editores. Medellín.
2004	Educación y democracia. Editorial Hombre Nuevo. Colombia.
2004	La poesía de Luis Carlos López. Hombre Nuevo Editores. Colombia.
2003-2005	Colombia: violencia, democracia y derechos humanos. Hombre Nuevo Editores. Medellín.
2005	Elogio a la dificultad y otros ensayos. Hombre Nuevo Editores. Medellín.
2006	Comentarios a “Así habló Zarathustra” de Nietzsche. Hombre Nuevo Editores. Medellín.
2007	Tres rescates. Fundación Estanislao Zuleta y Hombre Nuevo Editores. Medellín.
2007	Nietzsche y el ideal ascético. Universidad de Antioquia.
Artículos de Revistas	
1975	Homenaje a Thomas Mann. Revista Universidad del Valle #1. Santiago de Cali.
1977	Lógica y crítica. Revista Pliegos # 4. Universidad del Valle. Santiago de Cali.
1981	Reflexiones sobre el fetichismo. Revista de Extensión cultural #11, Universidad Nacional. Medellín.
1982	Sobre la idealización en la vida personal y colectiva y otros ensayos. Revista de Extensión cultural #12-13-14 Universidad Nacional. Medellín.
1985	La educación: un campo de combate. Entrevista a Estanislao Zuleta. Revista Educación y Cultura #4, FECODE. Bogotá.
1990	La violencia política en Colombia. Revista Foro # 12. Colombia.
2001	La participación democrática y su relación con la educación. Revista Polis. Universidad Bolivariana Vol. 1, #2.
2002	Ciudad e identidad. Revista de Estudios Sociales # 11. Colombia.
2006	Democracia, participación y sociedad en Colombia. Revista Foro # 59-60. Colombia.

Fuente: Tomado de Estanislaozuleta.com

Para Estanislao Zuleta el conflicto fue visto como parte esencial de la vida, pues afirmaba que una sociedad no conflictiva era tan absurda como un individuo sin angustias. El conflicto para Zuleta fue elemento constitutivo de su comportamiento y actuar vital, componente que hizo que se le identificara como un luchador contra toda doctrina, y que tanto en el pasado como en la actualidad es una voz palpitante que reclama atención ante la crisis ética

y de espíritu que en ocasiones se cierne sobre nuestra sociedad (Valencia, 1996). Para Zuleta el conflicto debe aflorar para darle un tratamiento, conclusión más que oportuna en un país como Colombia que en la actualidad sueña con superarlo en la dimensión armada y guerrerista, lógica que no compartía.

Y es que Zuleta jugaba en sus análisis a hablar de la actualidad social y sus problemáticas como también a presentar

ARTÍCULOS

Pag. 13

anticipadamente fenómenos y tendencias que han venido comprobándose durante estos ya 25 años de ausencia, como lo son sus llamados de atención sobre el voluntarismo militar cristiano y sus visiones reaccionarias, que denominaba como una metafísica de verdugos y culpables, siempre haciendo un llamado más a buscar la redención por la belleza (Ospina, 2015).

Para Zuleta, la política real era la rebelión ante el gobierno y la revolución ante el sistema, en donde la dominación es el mecanismo de orden imperante y lo que se debe buscar es el perfeccionamiento del mundo al que se debe combatir (Vallejo Morillo, 2006).

Sus concepciones sobre la propiedad, el matrimonio y la muerte en la obra de Tolstoi, presenta una interesante perspectiva que se puede calificar como económica en el sentido de que la vida es la principal propiedad y la muerte es una realidad extrema que configura expropiación.

El mensaje de Zuleta al mundo académico es el de la necesidad de un aprendizaje por y para la diversión que supera ese mundo gobernado por lo organizativo, jerárquico y el statu quo, que en su momento ya se vislumbraba y actualmente se presenta como lo dominante, un mundo de mezquindad y de cubículos universitarios. El prefería la tertulia, el dialogo racional e inspirador fuera de todo formalismo intelectual, con el que nunca congenió.

Fue un colombiano digno de resaltar y recordar por siempre, que participó activamente en la construcción de una mejor sociedad, fomentando la democracia, la equidad, los derechos de los ciudadanos y quien asumió de manera asertiva el rol de intelectual: era un artista y un político. Sus documentos, reflexiones y análisis basados en el pensamiento de autores clásicos fueron elaborados pensando en su país, lo cual marca la construcción del presente y el futuro de una sociedad que debe reflexionar.

BIBLIOGRAFÍA

- Arango, M. (2 de Abril de 2010). *marcoarango.blogspot.com*. Recuperado de <http://marcoarango.blogspot.com/2010/04/sobre-estanislao-zuleta-iv.html>
- www.estanislaozuleta.com. (15 de 02 de 2015). *Estanislaozuleta.com*. Recuperado el 15 de Junio de 2015, de <http://estanislaozuleta.com/>
- Ospina, W. (1 de Abril de 2015). *El Espectador*. Recuperado de La Redención por la Belleza: <http://www.elspectador.com/noticias/cultura/redencion-belleza-articulo-552869>
- Urrea Henao, J. (15 de Febrero de 2015). www.elpais.com.co. Recuperado de <http://www.elpais.com.co/elpais/cultura/noticias/legado-estanislao-zuleta-sigue-vivo-25-anos-despues-su-muerte>
- Valencia, A. (1996). *En el principio era la ética. Ensayo de interpretación del pensamiento de Estanislao Zuleta*. Cali: U. del Valle.
- Vallejo Morillo, J. (2006). *La rebelión de un burgués: Estanislao Zuleta, su vida*. Bogota: Norma.

BIBLIOGRAFÍA TEMÁTICA

Proyecto "Modelo Alternativo de Inclusión e Innovación Productiva: Construcción Social en Viotá", eje Turismo y Patrimonio Cultural

Compilada por: Oscar Javier Martínez, Julián Buchelli

- DANE. (2012). Encuesta de Consumo Cultural. Departamento Administrativo Nacional de Estadística. Bogotá: Dirección de Metodología y Producción Estadística (DIMPE).
- DeCarli, G. T. (2006). Un inventario de Bienes Culturales: ¿Por qué y para quién? San José, Costa Rica: Ediciones ILAM - Instituto Latinoamericano de Museos.
- García Ojeda, J. M. (2004). Turismo en el espacio rural y patrimonio histórico: desarrollo socioeconómico de las ciudades medias andaluzas. I Congreso Internacional Patrimonio, Desarrollo Rural y Turismo en el Siglo XXI-Osuna 2004, (págs. 1 - 12).
- Haulot, A. (1991). Turismo Social. México: Editorial Trillas S.A. de C.V.
- Ibañez, A. M. (2014). Costos económicos y sociales del conflicto en Colombia: ¿Cómo construir un posconflicto sostenible? En A. Rettberg, Encuentro con los otros: Perspectivas para la reconciliación en Colombia (págs. 221 - 268). Bogotá: Uniandes.
- JM, S. (2008). Valoración contingente y costo de viaje aplicados al área recreativa laguna de Mucubají. Economía, 119 - 150.

- Meskell, L. (2013). UNESCO's World Heritage Convention at 40: Challenging the Economic and Political Order of International Heritage Conservation. The University of Chicago Press.
- Ministerio de Cultura. (2008). Ley General de Cultura.
- Ministerio de Cultura. (2005). Manual para inventario de Bienes Culturales Inmuebles. Obtenido de <http://www.ilam.org/index.php/es/>.
- Monsalve Morales, L. L. (2011). Gestión del Patrimonio Cultural y Cooperación Internacional. Cuadernos de Cooperación para el Desarrollo No. 6, 1 - 116.
- Moreno Zapata, P. M. (2010). Patrimonio Cultural para Todos - Una Guía de Fácil Comprensión. Bogotá: MINISTERIO DE CULTURA.
- Moreira-Wachtel, S. S. (2013). La interpretación del patrimonio natural y cultural - Una visión intercultural y participativa. Ministerio del Ambiente, Dirección General de Educación, Cultura y Ciudadanía Ambiental. Lima, Perú: Forma e Imagen.
- Pizano Mallarino, O. (s.f.). Fiestas y patrimonio cultural. En: La Fiesta, la otra cara del patrimonio. Valoración de su impacto económico, cultural y social. OP Gráficas.
- PLAN DE DESARROLLO VIOTÁ TERRITORIO DE PAZ Y PROSPERIDAD 2012 – 2015. (2012). [www.viota-cundinamarca.gov.co](http://viota-cundinamarca.gov.co).
- Sabaté Bel, J. (2004). De la preservación del patrimonio a la ordenación del paisaje. Urbano, 42 - 49.
- Sabaté B, J. G. (s.f.). El valor estructurante del patrimonio en la transformación del territorio. APUNTES, 22 (1), 20 - 33.
- Sánchez, C. I. (2000). Patrimonio cultural y turismo ético en América Latina y Colombia. Bogotá: Universidad Externado de Colombia. Bogotá.
- Sepúlveda S, S. (julio de 2008). Gestión del Desarrollo Sostenible en Territorios Rurales: Métodos para la Planificación. 3 - 392.
- Throsby, D. (2008). Economía y Cultura. México: Gestión Cultural.
- Throsby, D. (1994). The Production and Consumption of the arts: A view of Cultural Economics. Journal of Economic Literature, 29.

- UNESCO. (2003). Identificar e inventariar el patrimonio cultural inmaterial. Organización de las Naciones Unidas para la Educación la Ciencia UNESCO, 1-16. Obtenido de <http://www.unesco.org/culture/ich/doc/src/01856-ES.pdf>.
- Valdez, F. (2006). Perspectivas culturales y cambios en el uso del paisaje: Sabana de Bogotá Colombia, SXVI y SVII. Agricultura Ancestral Camellones y Albaradas: Contexto social, usos y retos del pasado y del presente (pág. 139). Quito: Ediciones Abya-Yala.
- Velazco González, M. (2009). Gestión turística del patrimonio cultural: enfoques para un desarrollo sostenible del turismo cultural. Cuadernos de Turismo, 237 - 253.
- Vries, P. L. (2007). Sustainable Tourism: Ethical Alternative or Marketing Ploy? Journal of Business Ethics, 77 - 85.
- Zambrano, F. B. (1993). CIUDAD Y TERRITORIO: El proceso de poblamiento en Colombia. Bogotá: Tercer Mundo Editores.

RESEÑA: ¿POR QUÉ FRACASAN LOS PAÍSES?¹

REVIEW:
WHY DO COUNTRIES FAIL?

LEONARDO SANTANA VILORIA*

En los últimos 15 años se ha abierto una corriente de estudios sobre el desarrollo tendiente a responder a la pregunta sobre las causas últimas del éxito económico de ciertas naciones a través de su historia. Títulos como “Armas, Gérmenes y Acero” (2006) o “Civilización” (2012), buscan determinar las razones por las cuales Occidente llegó a dominar el globo durante los últimos 500 años mientras que otras civilizaciones, aparentemente con mayores recursos, se vieron subyugadas.

Muchas fueron las respuestas dadas en estos estudios: desarrollos en medicina y control de enfermedades, avances armamentísticos, propiedad privada o sociedad de consumo. Multiplicidad de factores que no parecen una respuesta clara sino un listado de accidentes que llevaron a la cima al mundo europeo occidental.

Una respuesta que intenta unificar estos factores en una causa común es dada por Acemoglu y Robinson en *¿POR QUÉ FRACASAN LOS PAÍSES?* (2012). Su teoría consiste en

* Leonardo Santana Viloria. Leonardo Santana Viloria. Economista y Magister en Ciencias Económicas. Profesor Asociado Universidad de Bogotá “Jorge Tadeo Lozano”. Correo: leonardo.santana@utadeo.edu.co

1. Acemoglu, Daron y Robinson, James (2012). Deusto. Barcelona.

dar a las instituciones el papel central en la generación de todo el posible desarrollo de una nación, cultura o civilización.

Estos autores desechan cualquier elemento natural como motor del desarrollo (geografía o recursos naturales, por ejemplo) al iniciar el texto con una comparación entre la región de Nogales, dividida entre México y Estados Unidos, donde cada división posee una calidad de vida completamente diferente a pesar de encontrarse prácticamente en el mismo sitio. A partir de allí, realizan un repaso histórico (una especie de gran historia) donde la presencia de instituciones inclusivas es el verdadero motor de desarrollo de cualquier grupo humano y causante de los factores identificados por los estudios anteriores (competitividad, avances tecnológicos, avances médicos, derechos sociales universales). Son las instituciones inclusivas las que hacen que las dos Coreas tengan un nivel de desarrollo tan desigual a pesar de estar conformadas por personas de la misma cultura en la misma península.

El libro define como “instituciones inclusivas” aquellos acuerdos sociales donde la mayor parte de la población puede participar en la toma de decisiones políticas y beneficios económicos. Se contrapone a este concepto el de “instituciones extractivas” donde un segmento de la población explota a otro sistemáticamente privándolo de beneficios y derechos de participación social.

De esta manera *¿Por qué Fracasan los Países?* se convierte en un tratado fundamental del liberalismo y la democracia, al poner a esta última como única posibilidad de éxito de las naciones. Si Amartya Sen (2000) había fundamentado a la libertad como fin último del desarrollo, Acemoglu y Robinson reafirmaron que las capacidades libertarias convertidas en instituciones son la mejor forma de organización social. De esta forma se

configura un nuevo eslabón en la vieja estructura liberal-occidental que inició con la mismísima defensa de la descentralización política y moral de *La Riqueza de las Naciones* y *Teoría de los Sentimientos Morales* de Adam Smith.

En todo caso, cabe aún preguntarse, ¿es tan sólido el edificio teórico de este texto? Si bien es muy atractiva su teoría unificada de las instituciones y el desarrollo, no responde definitivamente a la pregunta de cómo se originan estas instituciones, una cuestión necesaria para llevar a la práctica esta teoría y para convertir el repaso histórico del libro en políticas públicas. De hecho el texto hace referencia a un “devenir circunstancial de la historia” que se encuentra con una “coyuntura crítica” y da como consecuencia un “punto de inflexión” para la creación de instituciones inclusivas. Con una increíble cantidad de ejemplos (que no deja por fuera ningún continente), se muestra como diversas culturas tuvieron instituciones extractivas (como el feudalismo inglés) que mediante una coyuntura crítica (como una revuelta noble) marcó un punto de inflexión (como la Carta Magna) que dio paso a la consolidación de instituciones inclusivas.

De la misma forma que el crecimiento español durante la conquista y colonia de América fomentó instituciones extractivas (en todo el sentido de la palabra), el crecimiento del comercio inglés en el Atlántico, derivado de la victoria naval sobre los españoles en 1588, impulsó un mayor poder de los comerciantes privados que exigieron mayores derechos a la corona. Sin embargo, en este ejemplo es pertinente preguntar ¿por qué esto no sucedió en España que tenía un comercio más activo que Inglaterra y Holanda, países que a la postre prosperaron mucho más con sus instituciones inclusivas? La respuesta de los autores es simple, se trata de suerte:

"A pesar del círculo vicioso, las instituciones extractivas pueden ser sustituidas por instituciones inclusivas. Sin embargo no es algo automático ni fácil. Suele ser necesario que haya una confluencia de factores, sobre todo una coyuntura crítica, acompañada de una amplia coalición de los que exigen reformas u otras instituciones existentes propicias, para que una nación avance para lograr instituciones inclusivas. También es clave la suerte, porque la historia se desarrolla de manera circunstancial".

Así que las instituciones democráticas generan desarrollo, pero generar este tipo de

instituciones parece completamente azaroso. Este sinsabor teórico será el que estudios posteriores deban abordar.

Sin embargo, más allá de este problema, es posible pronosticar el futuro según las pautas ofrecidas por el libro. China se convertirá en la mayor economía del mundo de seguir su ritmo actual de crecimiento, pero de acuerdo a la teoría de Acemoglu y Robinson, tal crecimiento no será sostenible a menos que existan profundas reformas en sus instituciones políticas y económicas, basadas en la extracción de la élite del partido dominante sobre el gran mercado chino.

La historia se encargará de conceder o no razón a este texto que se perfila como el gran clásico de principios de siglo.

BIBLIOGRAFÍA

- Acemoglu, Daron y Robinson, James (2012). ¿Por qué Fracasan los Países? Deusto. Barcelona.
- Diamond, Jared (2006). Armas, Gérmenes y Acero. Debate. Barcelona.
- Ferguson, Neil (2012). Civilización: Occidente y el Resto. Debate. Barcelona.
- Sen, Amartya (2000). Desarrollo y Libertad. Planeta. Barcelona

ARTÍCULOS

FINDING EMPIRICAL EVIDENCE OF EXCHANGE RATE INTERVENTION BY FORWARDS MANIPULATION OF SWISS CENTRAL BANK EUR/CHF

ENCONTRANDO EVIDENCIA EMPÍRICA DE LA POSIBLE MANIPULACIÓN DEL BANCO CENTRAL SUIZO EN LA TASA DE CAMBIO EUR/CHE

CARLOS EDUARDO YEPES CONTRERAS*

ABSTRACT

Key words: Central Bank, spot market, forwards, exchange rate

Classification JEL: B22, C01, C51

According to the model Mundell Fleming (ISLMBP), some effects about exchange rates could be explained by contracts and market mechanisms that the central bank uses to affect it. The economic situation in Switzerland

and the policy that applied the SNB Swiss National Bank (SNB) are part of this work; the reader will find an empirical statistical analysis about the possibility that the SNB are controlling the exchange rate through manipulation of the Forward markets.

* Economics at Escuela Colombiana de Ingeniería “Julio Garavito” and Specialist Degree on Finance and Capital Markets, University of Sabana, Bogotá –Colombia. Master’s Degree on Tourism, University of Huelva, Spain. Master of Science Degree on International Management, Alpen-Adria-Universität Klagenfurt, Austria. Correo: tiki15@hotmail.com, cyepesco@edu.uni-klu.ac.at

RESUMEN

Palabras Clave: Banco Central, el mercado de contado, plazo, tipo de cambio

De acuerdo con el modelo Mundell-Fleming (IS LM BP), algunos efectos sobre los tipos de cambio podrían ser explicados por medio de los contratos y los mecanismos de mercado que el Banco Central utiliza para afectarlos. La situación económica en Suiza y la política

que aplica el Banco Nacional de Suiza SNB (SNB) son parte de este trabajo; en el cual, el lector encontrará un análisis estadístico empírico acerca del posible control sobre los tipos de cambio a través de la manipulación de mercados a término que el SNB está llevando a cabo.

INTRODUCTION

Is the number of monetary units that the market is willing to pay or sell for a determinate quantity of foreign currency that is known as Spot price (Spot Market = the market for immediate exchange of monies). The price that the transactions are made is the equilibrium price, for a specific place and time. In the foreign exchange market, the prices explained in the following way:

$$\text{EUR/CHF} = 1.20$$

According to this quote, the market requires 1.20 Swiss Francs for each Euro currency. (Nominal prices) the level of this currency prices depend of the exchange rate system that is used in a specific country. The inverse position will be:

$$\text{CHF/EUR} = \frac{1}{1.2} = 0.83333$$

This quote require 0.8333 Euros for each Swiss Franc.

Exchange rate systems

Part of this work considerate the free exchange rate with free and dirty flotation used in the Euro and Swiss market.

Free Floating

Is an exchange rate system in which the value of the currency is determinate by the market according to the supply or demand of the foreign currencies without government intervention. The advantages of this exchange system are that the exchange rate varies automatically according to changes in macroeconomic variables. The result is no gap between real and nominal exchange rate

(Sharan, 2003) and these adjustments will do not have cost (Friedman, 1953). Another advantage is that the system will have their own isolation proprieties from external shocks.

The flows of capital are the principal elements that influence the exchange rate level, but in the long-run term the exchange rate prices are determinate by the competitiveness of the economy as is explained in Mundell–Fleming model (Extension of ISLM model).

Flexible exchange rates can imbibe easily external shocks in the economy. After an external shock occur, the movement of the exchange rates (appreciate or depreciate) will increase or reduce the production by changing the demand for domestic goods, restoring the equilibrium.

Dirty flotation

Is system called also managed float, is a hybrid of free-floating exchange rate system. In this exchange rate system, the Central Bank (monetary authorities) make eventual direct and indirect interventions in the foreign exchange market (buying or selling currency). These interventions disclosed or undisclosed depending of the policy of the central bank. The purpose is to reduce the short-run uncertainty in the market also to achieve certain objectives according to the monetary policy (Levi M. D., 2005). These interventions combined with movement of interest rate levels to achieve long-run effects this model has adopted by several countries around the world.

Mundell-Fleming model

The Keynesian model add the international relations to an economy and allow predicting the effects of a fiscal and monetary policy in the external sector know as Balance of Payments (exchange rate, flows of capital etc.) (Sokas, 2002).

The model emphasis in the balance of payments and capital account focusing in:

- Capital inflows (transactions into a local currency)
- Capital outflows (transactions into a foreign currency)

These Capital flows caused by differentials in interest rates but also due asset market considerations, money flows into the domestic financial market (Yield attractiveness). The model also assume that the prices of an economy are fixed, perfect substitution between domestic and foreign currency bonds, highly integration of financial markets, the aggregate supply curve is Horizontal and the income is determine only for the aggregate demand (Mashed, 1997).

45

The goal of the model is to analyses the relative efficacy of fiscal and monetary policy depending the economy exchange rate regime and the degree of international capital mobility.

Components of the model

The model have 3 components IS, LM, BP (Waldo Mendoza Bellido, 2006)

IS:

$$Y = C(Y_d, r) + I(r) + G + NX(Y, Y^*, e)$$

LM:

$$\frac{M}{P} = L(r, Y)$$

BP:

$$BP = (I - S) + NX = KA + CA = 0$$

Y= National Production

Y* = International Production

C= Consume

I = Investment

G = Government Expenses

NX = Net Exports

M = Monetary Base

P = Level of prices

BP = Balance of Payments

S = Savings

KA = Capital Account
 CA = Current Account CA = NX
 r = Interest rate
 e = exchange rate level

Assumptions

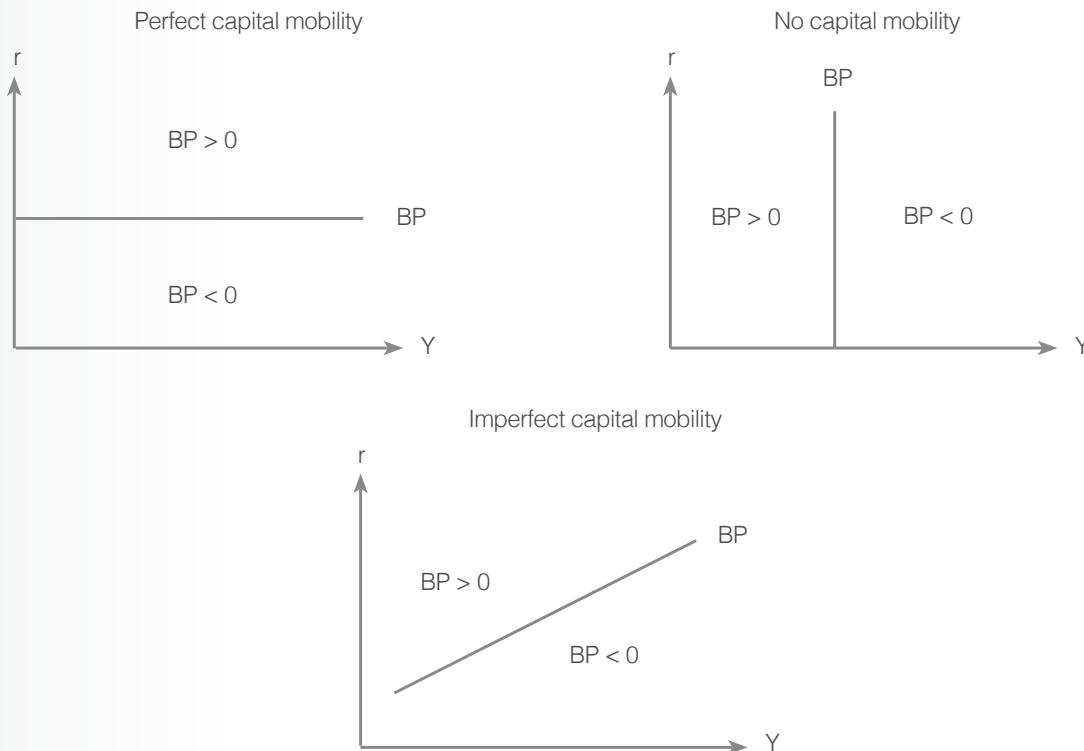
The Slope of the BP curve will change depending the mobility degree of capital (Rokicki, 2014).

No.2

ARTÍCULOS

REVISTA ECONOMICUS HETERO DOXUS

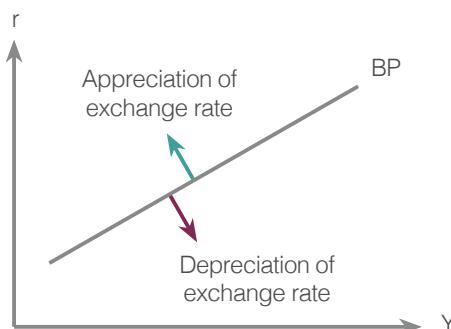
GRAPH No. 1
Capital Mobility



In economies with a flexible exchange rates system, the model predict that the exchange rate should adjust the shocks of national and foreign economies. The result is

that the BP curve move upwards or downwards depending if the domestic currency suffer an appreciation or depreciation, as shows the graph 2.

GRAPH No. 2
Changes on the exchange rate



Pag. 23

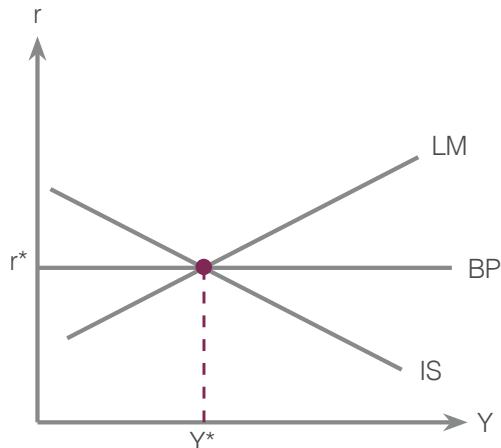
With fix exchange rate economy the model predict that the central bank will maintain fixed the price of national currency buying or selling foreign currencies from international reserves. The effect is the balance of payments curve is fixed. The only exception that the curve will

move is once the central bank decide to devalue or reevaluate national currency.

The equilibrium of the model is achieved when all the equations intersect one to another in a point of r^* and Y^* (IS, LM and BP) as follow the next graph 3.

GRAPH No. 3

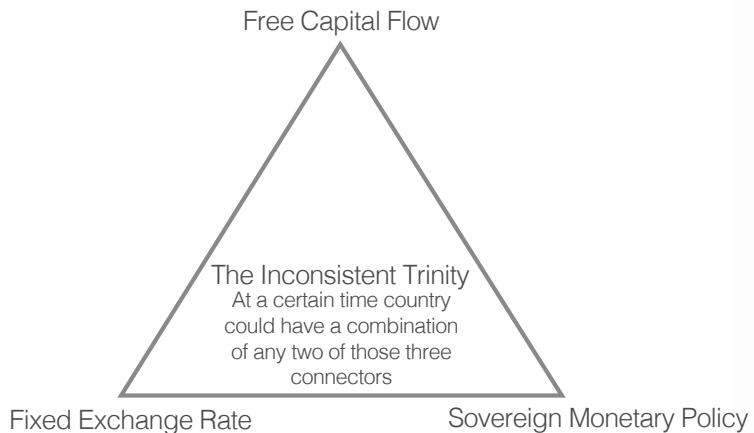
ISLM-BP



This model also establish the impossible Trinity or trilemma that consist in an incompatibility for an economy to have at the same time a fixed exchange rate, free

capital flow and independent monetary policy. Only two of these three policies are possible to achieve at the same time (Gert Bekaert, 2012).

GRAPH No. 4
The Inconsistent Trinity¹



1. <http://krugman.blogs.nytimes.com> (Krugman, 2014)

This document we will focus the analysis of shock effects in the economy by fiscal and monetary policies with a perfect capital mobility and imperfect capital mobility and with fix and flexible exchange rate.

Monetary and fiscal Policies Effects

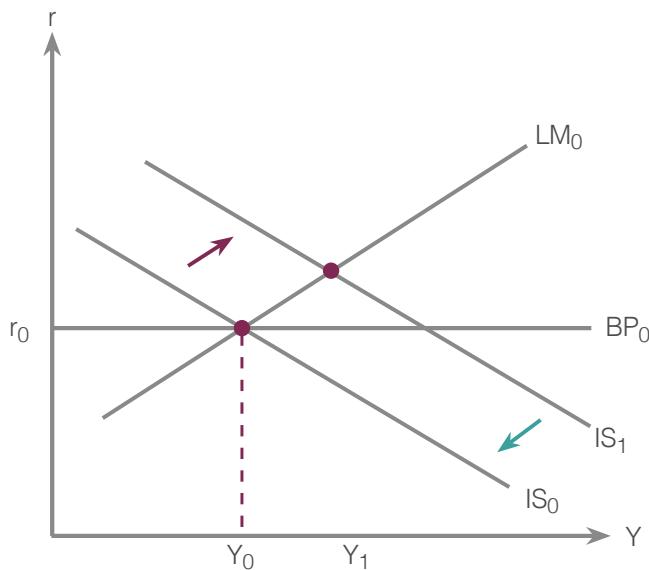
The model predict the effectiveness of the different types of policies under flex-

ible and fixed exchange rates and perfect and imperfect capital mobility. It related to the economic reality of Switzerland. In this work, I will not describe the predictions of the model in the case of no capital mobility.

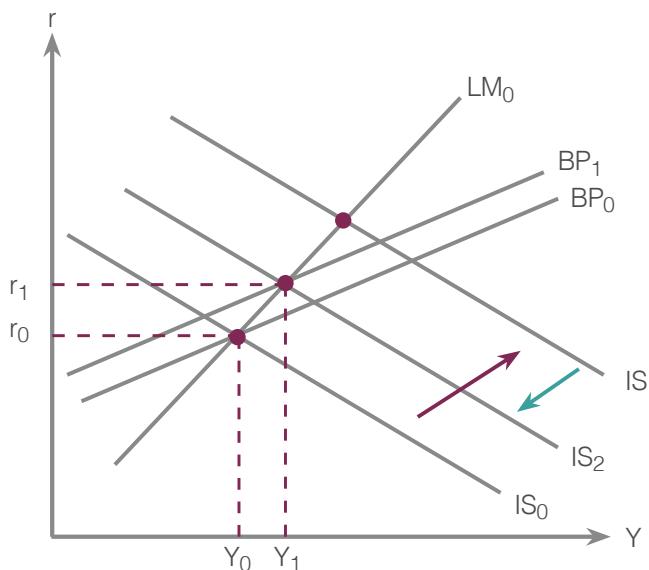
No.2

Fiscal policy effects with free exchange rate

GRAPH No. 5
Perfect capital movement



GRAPH No. 6
Imperfect capital movement



ARTÍCULOS

REVISTA ECONOMICUS HETEROODOXUS

Pag. 25

An expansionary fiscal policy with a flexible exchange rate, will shift the IS_0 curve to the right side to the level of IS_1 curve, the effect is an increase of Y and r . The consequence is the local interest rate increase over the international interest rate producing an inflow of capital into the country; the balance of payments will register a surplus (foreign currency converted into a Local currency searching for high interest. Increase KA) with a result of domestic currency appreciation.

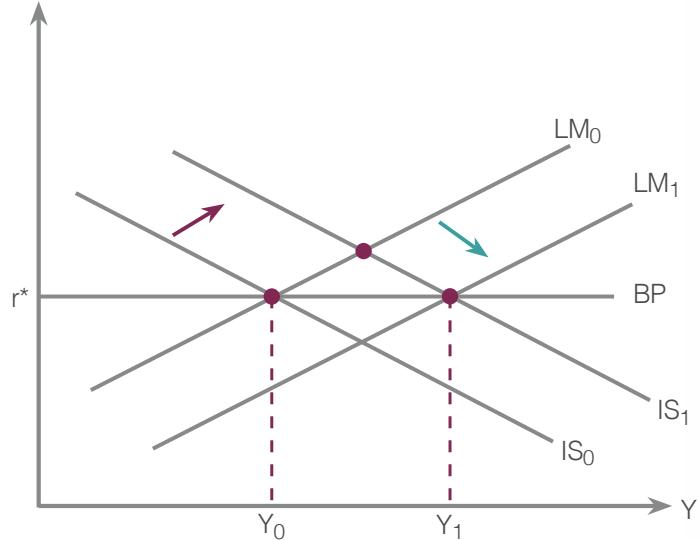
This appreciation of the currency will increase the imports because the relative prices fall nevertheless will cause also a decrease of exports because the relative prices increase producing that the curve IS_1 shifts back to IS_0 level. In the result, Y and r remain constant as shown in the graph 5. The conclusion is under these conditions the fiscal policy is ineffective.

The second case with an imperfect movement of capital, the graph 6 shows an initial shift of the curve from IS_0 to IS_1 level, also an increase of the interest rate level that will produce an appreciation of the currency making that the BP curve shift up. The net exportations will reduce, producing that the IS curve shift down to IS_2 level, with a new equilibrium point Y^* , with a higher level of interest rate r^* . The conclusion under these conditions are the fiscal policy is moderately effective and will cause increases of interest rate.

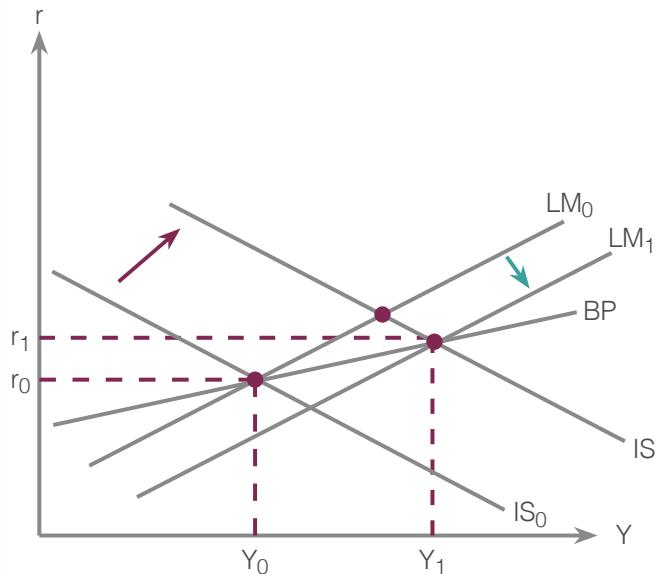
Fiscal policy effects with a fix exchange rate

In the next graphs, we can observe an expansionary fiscal policy with a fixed exchange rate.

GRAPH No.7
Perfect capital movement



GRAPH No.8
Imperfect capital movement



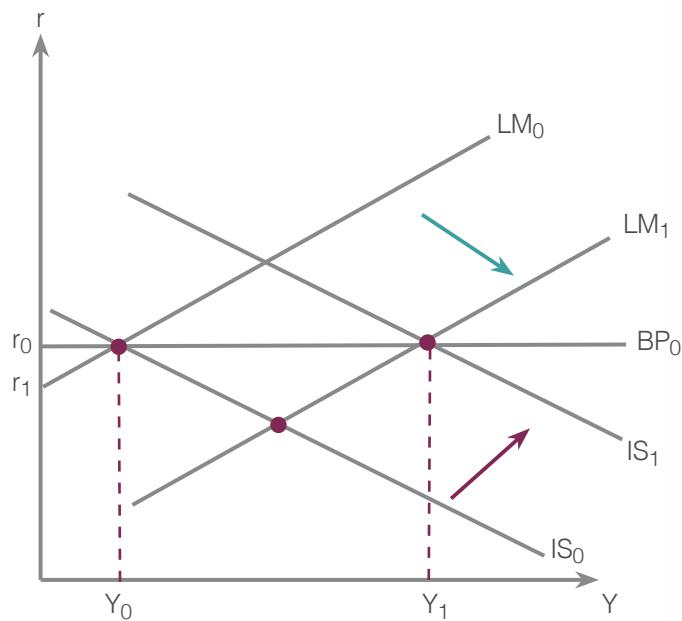
The expansionary fiscal policy will shift the IS_0 curve to the right side till level of curve, the effect is an increase of the levels of Y_0 and r^* . This increase in the interest rate will increase the inflow capital, producing a surplus in the balance of payments.

How the exchange rate is fixed, the central bank will increase the offer of M1 to reduce the revaluation pressure made by the balance of payments as show the graph 7. This monetary expansion will shift the LM_0 curve to the right side to LM_1 , this movement will increase even more the production till level of Y_1 , and will reduce the interest rate to the original level r^* under these conditions the fiscal policy is effective.

The second case with an imperfect capital movement shows the graph 8. The IS curve shifts right to IS_1 , and increase the level of production Y_0 and r^* . This increase of interest rate will cause inflow of capitals. To reduce the revaluation pressure the central bank will increase the offer of M1 to keep the exchange rate, will shift the LM_0 curve to the right side to LM_1 , this movement will increase even more the production till level of Y_1 , with an interest rate level r_1 . This level of interest rate is higher than before the fiscal shock. The fiscal policy is effective for increase income but will maintain higher levels of interest rate, that can affect the fix exchange rate policy.

GRAPH No.9
Perfect capital movement

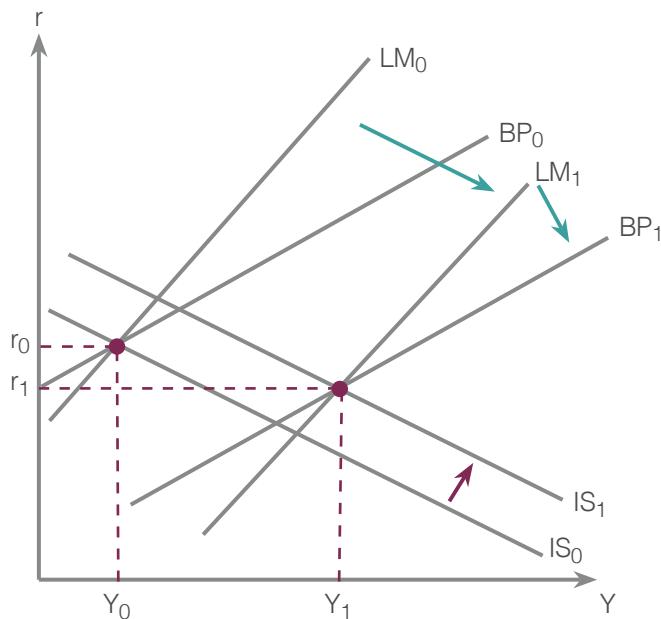
PROGRAMA DE ECONOMÍA



GRAPH No.10
Imperfect capital movement

ARTICLES

Pag. 28



An expansionary monetary policy with flexible exchange rate and perfect capital mobility will have an effect to increase the monetary base-shifting LM_0 curve to the right

side to LM_1 level; the effect will be an increase of Y_0 to Y_1 , and a decrease of the national interest rate from r_0 to r_1 .

The second effect is an outflow of capital (local currency converted into a foreign currency searching for high interest in foreign markets. Decrease KA) with a result of domestic currency depreciation. The depreciation will cause an increase of the exports level because the relative prices decrease, that will shift the curve IS_0 to the level of IS_1 curve, with a final result an increase of the level of Y_1 , and the interest rate r_0 will remain constant (graph

9). Under these conditions, the monetary policy is effective.

The second case graph 10 with an imperfect movement of capital. The graph shows that the curve will have the same effect described above with additional movement. The BP_0 curve will decrease to BP_1 by an increase in net exports. Producing that the curve IS_0 will shift to the level of IS_1 curve, with a result of higher Y_1 level and lower r_1 . Under these conditions, the monetary policy is effective.

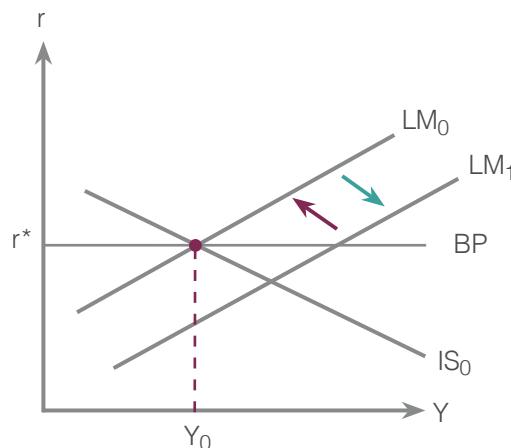
Monetary policy effects with a fix exchange rate.

No.2

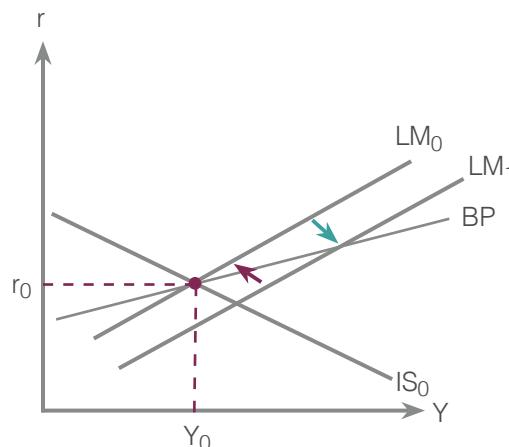
REVISTA ECONOMICUS HETERO DOXUS

ARTÍCULOS

GRAPH No.11
Perfect capital movement



GRAPH No.12
Imperfect capital movement



An expansionary monetary policy with flexible exchange rate and perfect capital mobility will have an effect to increase the monetary base shifting LM_0 curve to the right side to LM_1 level. The effect will be a decrease of interest rate r^* and increase of Y_0 level.

The second effect is an outflow of capital (local currency converted into a foreign currency searching for high interest in foreign markets. Decrease KA) with a result of a deficit in the balance of payments. To reduce the devaluation pressure the central bank will sell foreign currency (sell international reserves) and will reduce the money supply (decrease M1). This will shift again the LM_1 curve to the left side in the original level LM_0 as show graph 11. The level of production will return to the level Y_0 . Under these conditions the monetary policy is ineffective.

In the graph 12 a monetary policy with an imperfect movement of capital shows that the LM_0 curve shifts to the right side to LM_1 . The effects are the same like in a monetary expansion with perfect capital movement described before. Finally will occur a deficit in the balance of payments, the central bank will sell international reserves and reduce the money supply shifting LM_1 curve to the left side in the original level LM_0 keeping constant Y un r. Under these conditions, the monetary policy is ineffective.

The monetary authorities and the government can combine the policies (fiscal and

monetary) to achieve better results according to the time line policy.

This model predict three scenarios depending of the capital mobility, fixed or free exchange rate.

Under perfect capital mobility a shock caused by monetary or fiscal policy (expansion or contraction) will shift the curves I Sand LM at the same time but the interest rate will return to his original level (world interest rate level) in short-run.

Under a flexible exchange rate regime a monetary expansion has direct effect on the LM curve and shifts the LM curve towards the right initially. Then the resulted increase in the exchange rate (depreciation) has the consequence of moving the IS curve to the right as well a phenomenon similar to the effect of a fiscal expansion.

Under a fixed exchange rate regime a fiscal expansion has direct effect on the IS curve and shifts the curve towards the right initially. However, since the exchange rate is fixed, the deterioration in the current account maybe not be exactly offset by the amount of capital inflows, leading to an adjustment or change in official reserves and money supply. This consequently changes the LM curve position. (Wang, 2009)

As a conclusion with flexible exchange rates, the monetary policy tends to be more efficacious in effecting domestic output in the short-run. The opposite case is with fix exchange rate, the fiscal policy is more effective.

FACTORS THAT AFFECT EXCHANGE RATE

Balance of payments BOP

Is an account that register international transactions of products and services in a country for frame of time, based on this account is possible to determinate the necessities for foreign capital to finance the net exportations (Federal Reserve, 2014)

Any transaction that causes money to flow into a country is a credit to its Balance

of Payments -BOP account, and any transaction that causes money to flow out is a debit. The BOP includes:

Current account: Flows of goods and services.

Capital account: Capital transfers and non-financial assets.

Financial account: Investment flows.

When the BOP has negative value it shows that, the country don't have enough export sales

Inflation

to pay the incoming imports and must demand foreign currency from the local market or in external debt in order to pay the negative trade. This increase the demand of foreign currency in the country, increasing their price of the exchange rate. In the opposite case that the net-exportations sum is positive the country have a surplus of foreign currency that when this surplus will be monetized will reduce the price of the exchange rate by an increase of the foreign currency surplus.

Interest rate

Is the Yield paid to money lent out for a period of time usually expressed as a percentage (Paul Samuelson, 1989), this rate is the price that the participants of the market pay for use of the money, in a determinate country, this rate is set by the central bank and the market and depending of the level of interest rate affect the flows of cash in an economy (M1) also affecting the exchange rate.

When the Central Bank increase the interest rate, also rice the attractiveness of the foreign investors to invest foreign capital in the home country, because the Yield paid to money is higher, when this flows of foreign capital enter in the home country they will increase the offer of foreign currency and will reduce the price of the exchange rate. In the opposite case when the interest rate is lower the flows of capital will immigrate to another countries searching for more Yield (outflow), this produce an increase of demand for foreign currency and increase the price of the exchange rate as the interest parity equation shows.

Equation 1 – interest rate and spot

$$\frac{i - i^*}{1 - i^*} = \frac{S_{t+1}^e - S_t}{S_t}$$

i= home interest rate

i*= foreign interest rate

S= Spot rate in time (t)

Inflation is the loss of the quantitative purchase power of the money, this inflation affect the exchange rates affecting the price competitiveness of the home country exports versus the same products from a foreign producer.

(Gert Bekaert, 2012)

When the inflation increase significantly, the national products will increase their prices in the same or higher proportion making less competitive the country exports, in the case that this export products have a substitute that is produced in an external country but with less price, the result will be the decreasing of the quantity sales for these export products and decreasing the inflow of foreign currency, also an increase in the rate of inflation make less attractive the capital invests in the home country because the real interest rate decrease this situation also reduce the foreign capital flow.

Foreign investment [T2]

An international flow of capital (in or out) made by foreign investors (persons or companies) during a determinate country, this cash movements had different objectives depend of the sector and horizon investment. (Gert Bekaert, 2012) These flows of capital have two types FDI and Hot Money.

When a company or an investor make a significant investment in another country for a period longer as a year is considerate FDI (foreign direct investment), usually they are associated to set up business.

Hot money is a short-term the speculative flow of funds that search profit of the switch of exchange rates in the financial markets.

This investments will vary depend of attractiveness of the country, the level of risk, frame of time, etc. This variable affect directly the exchange rate market because change directly the flow of foreign currency capital in the country. If the country have attractiveness for the investors the flow will be positive and increase

the offer of foreign currency (depreciate the price of the foreign currency by an increase of the supply) or in the opposite case that the country is not attractive to the foreign investors could produce an outflow of the capital appreciating the exchange rate by demand.

Country risk

Is the sum of adverse political and economic risks that could affect the investors for operate in a determinate country (Gert Bekaert, 2012). Depending of the level of country-risk and the expectations of the market participants, the flows of the money can change and affect the exchange rate.

In the case that the country risk perceived as a minimum by the investors, they will invest easily their monetary sources; also, they are willing to accept lower return of the Yield for the investment. When a country have very low risk are considerate a refuge currency, in

the times when the forex market experiment different market shocks. These countries with very low risk have easily and cheap access to foreign assets for finance their governments expenditures.

This level of risk increase or decrease significant the flows of foreign capital to a specific country also increase or decrease (risky/riskless) the level of interest rate that the agents of the market require for lend their assets

Supply of money (M1, M2)

Are the monetary aggregates in an economy M1, M2 (Paul Samuelson, 1989), the central bank have the exclusivity to create and regulate the quantity of money in a country (Gert Bekaert, 2012). Depend of the monetary policy the central banks can affect the exchange rates in a variety of ways. The next table, explain the component of the monetary base for the Euro area.

TABLE NO. 1
Libros y publicaciones de Estanislao Zuleta.

Liabilities ²	M1	M2	M3
Currency in circulation	X	X	X
Overnight deposit	X	X	X
Deposit with an agreed maturity up to 2 years		X	X
Deposit redeemable at a period of notice up to 3 months		X	X
Repurchase agreements			X
Money market fund (MMF) shares/units			X
Debt securities up 2 years			X

Narrow money (M1) includes currency, i.e. banknotes and coins, as well as balances which it has been immediately be converted into currency or used for cashless payments, i.e. overnight deposits³.

“Intermediate money (M2) comprises narrow money (M1) and, in addition, deposits with a maturity of up to two years and deposits redeemable at a period of notice of up to three months. Depending on their degree

2. Liabilities of the money-issuing sector and central government liabilities with a monetary character held by the money-holding sector.
3. <http://sdw.ecb.europa.eu/>

of moneyless, such deposits can be converted into components of narrow money, but in some cases there may be restrictions involved, such as the need for advance notification, delays, penalties or fees. The definition of M2 reflects the particular interest in analysing and monitoring a monetary aggregate that, in addition to currency, consists of deposits, which are liquid.

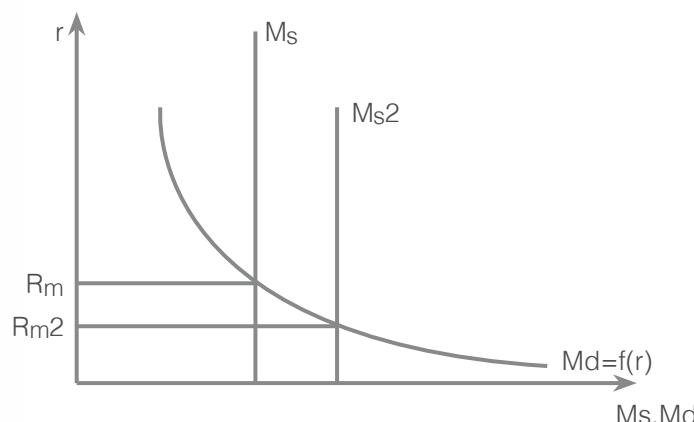
Broad money (M3) comprises M2 and marketable instruments issued by the MFI sector. Certain money market instruments, in particular money market fund (MMF) shares/units and repurchase agreements are included in

this aggregate. A high degree of liquidity and price certainty make these instruments close substitutes for deposits. As a result of their inclusion, M3 is less affected by substitution between various liquid asset categories than narrower definitions of money, and is therefore more stable'. (European-Central-Bank, 2014)

The manipulation of monetary aggregates

In an economy when the monetary aggregates are manipulated (M1) the result is that increase or decrease the money supply for the economy.

GRAPH No.13
Money Market and changes of the supply



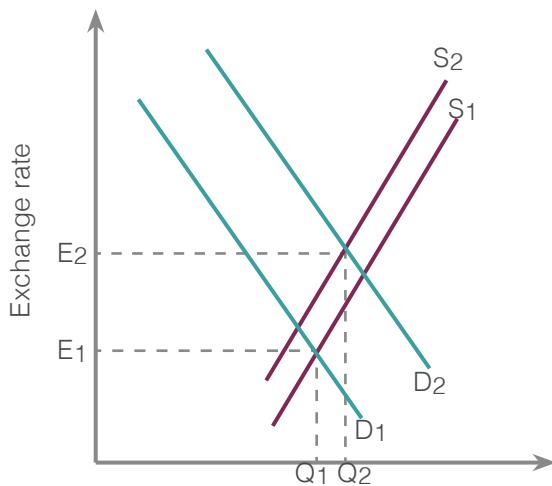
These manipulations mostly could have inflationary, GDP and exchange rate effects, depending of the circumstances of the manipulation. In this work I will focus on the effects of the exchange rate market.

One way to manipulate the monetary aggregates by the central bank are sell or accumulate foreign currency (changing the level of international reserves) another ways of direct intervention are through OMO operations, buy and sell sovereign bonds.

These interventions have a direct effect in the forex market in a short term. The

central bank will buy foreign currency into the FX market, increasing the demand of (shift from D_1 to D_2) foreign assets and accumulating international reserves, at the same time to pay this operations the Central bank will increase M1 (print money to pay, graph 14) increasing the surplus of M1 the result is an appreciation of the price of foreign currency by demand (short term) and depending if the OMO is sterilized or not could affect another variables, this type of operation will be explained in the next chapters.

GRAPH No.14
Foreign Exchange Market



The manipulation of the bonds market is a result of interest rate changes by changing the increasing or decreasing the demand of the bonds market, this manipulation could have short and middle term results.

Tools to affect the currency prices by the Central bank.

In the actual economic systems in the

world with free and dirty flotation exchange rate systems, the central banks have several tools to affect the exchange rate prices in the economy. These tools consist to modify the amounts of assets and liabilities of the central bank having as a result variations of the supply and flows of money. (Table 2)

TABLE NO. 2
Assets and Liabilities

Assets	Liabilities
Official international reserves Domestic credit • Government bonds • Loans to domestic financial institutions Other	Deposits of private financial institution (Bank reserves) Currency in circulation Other

Bank reserves

Are the amount of money that monetary Institutions (commercial banks) have on store at the central bank usually with non-interest bearing (GertBekaert, 2012). The central banks can modify this amounts of required reserves depend of the convenience of the monetary policy. If the

quantity of reserves is increased, the money available at the economy will reduce is a tool common used by the central banks.

Liquidity Changes

The second tool of the central bank is to modify the quantity of currency available

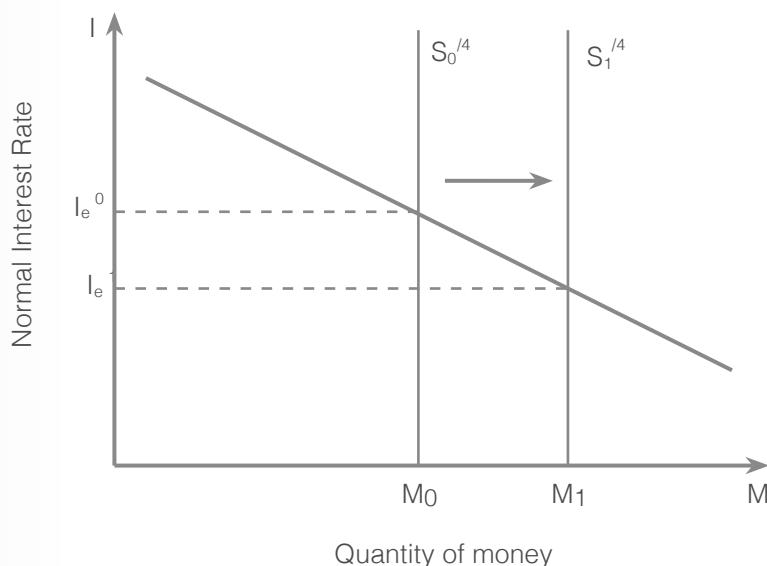
for use (coins and bills). As the central bank have the exclusive seigniorage of the country they can create and retire from the market as many notes and coins how require the economy, however this actions must be a coordinated plan of monetary policy. Because an expansion or reduction of the monetary offer will have inflationary, GDP, exchange rate

and interest rate consequences for the country depending the cycle of the economy.

The Bank reserves and the total quantity of money (notes and coins) in an economy are the monetary base of the country (M_1). In the next graph, we can observe the curve of offer and demand in the monetary market.

No.2

GRAPH No.15
Money Market and Nominal Interest Rate



OMO Operations

Open market operations (OMOs) are one of the most important tools for a central bank; these operations used to affect the money supply through the purchase or sale of government bonds, injecting money directly (M_1) into the monetary system because the injections of money offered directly to monetary institutions, households and firms in the exchange market. They are short-term objective. (Federal-Reserve, 2014)

Credit to the domestic financial sector

The central bank as a lender of last resort supply loans to domestic financial institutions when they require funds, preventing bank

runs in time of panic and financial crisis or Inflationary problems. (Gert Bekaert, 2012)

Fifth tool is the official reserves; it composed by different classes of reserves.

Foreign exchange reserves are the reserves of the central bank in a foreign currency denominated as bonds, or deposits. The official Foreign Exchange Reserves according to the International Monetary Fund are (IMF, 2014)

- U.S. dollar
- Pound Sterling
- Japanese Yen
- Swiss Francs
- Canadian Dollar
- Australian Dollar
- Euro
- Gold reserve

ARTÍCULOS

REVISTA ECONOMICUS HETERO DOXUS

IMF-related reserves are the reserves maintained in a credit line.

Types of interventions

After defined the tools that the central banks have to affect the money market and the exchange rate we can observe two types of foreign exchange interventions - direct and indirect interventions.

The indirect interventions are when the central bank manipulate the macroeconomic variables in the economy through monetary policies as expansion or contraction of M1 or manipulation of interest rate. These interventions do not adjust the market immediately, the economy require time to adjust depending if the policy applied have a long run or short run. These kind of interventions and their consequences where explained in the Chapter 1 with the Mundell-Fleming model.

The direct interventions are considerate when the Central bank affect directly the financial market the interventions conducted buying or selling foreign currency or bonds, the objective to correct troubles in the economy and reducing the degree of uncertainty in the market. These interferences with the free market have a specific objective, and affect directly the exchange rate prices and the short-term interest rate level. In long run this interventions have several macroeconomic effects in the economy of a country.

The effects are when the central bank buy directly foreign currency in the financial market will increase the offer (M1) of the domestic currency also when the central bank sell foreign currency decrease the quantity of the domestic currency (M1). These direct interventions are divided in two types of intervention sterilized and non-sterilized.

Non-sterilized intervention

Central bank non-sterilized intervention are the interventions that the central bank buy or sell domestic or foreign currency in

the local financial market that was not previously in circulation. This not sterilization of the new currency have direct effect on the money supply, decreasing or increasing the central bank's net foreign assets (NFA) and a contraction or expansion of the domestic monetary base (MB) with secondary inflationary effects.

Sterilized interventions

Are the methodology by which central banks guarantee, that the foreign exchange interventions do not influence the monetary base. These operations include domestic assets transactions that restore the financial equilibrium in the monetary base that was before the intervention in order to keep prices stability, and reducing the inflation risk.

Effects of central banks interventions

In economics are different perceptions about the Effects of central banks interventions. Few authors made several studies about the effectiveness of the central bank interventions and affirm, this interventions do not have influence nearing equilibrium rates, they simply diminish the speed at which the rate changes into equilibrium, and when the central banks are able to break the strong foreign exchange market efficiency the central bank may be prepared for the cost of these interventions of the foreign exchange market that in several cases result in loses wasting the money of the taxpayers. (Friedman, 1953)

Other authors defend the effectiveness of these interventions and affirm that is a necessary bad in order to protect the economy but is not an economic consent about this theme.

Hedging instruments

Are the diverse variety of hedging instruments used in the financial markets with the objective to reduce the risk exposition of the

market participants according to their necessities, for practical purposes of this work we will considerate only 2 hedging instruments.

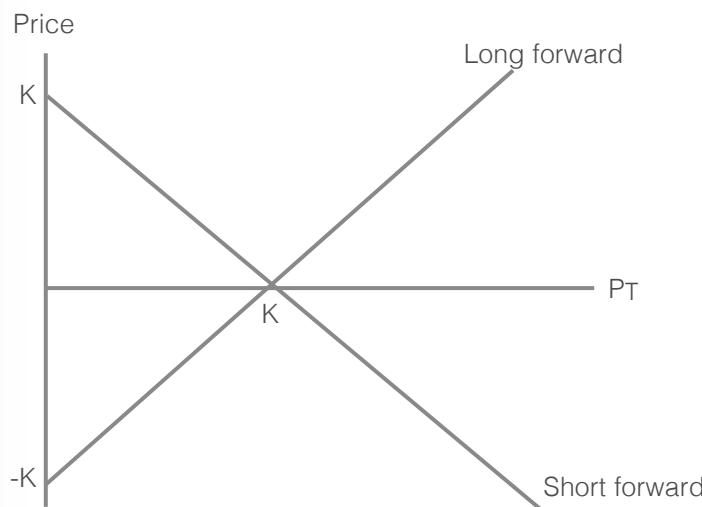
Forwards

The forwards are contracts of foreign currency made between banks and market participants; the transactions will be effective in sort (delivery contracts). This transaction are made at a fixed future price

(the price of the transaction do not change across the time) and will set a specified amount of one currency to be exchange (customize for each contract). The price of these contracts is the forward rate that is set at the time the parties enter into the contract. (Gert Bekaert, 2012) The party agreeing to buy the underlying assets (Bid) in the future assumes a long position, and the party agreeing to sell (Ask) the asset in the future assumes a short position.

No.2

GRAPH No.16
Forward Market



Futures

Are forward contracts that are trade daily on an exchange-market, the market participant's trade standardized contracts that represent certain amount of currency these contracts cannot be customize as the forward contracts, these transactions occur electronically in an exchange market.

Size Contracts

The size of these contracts are fix and their size depend of the currency traded (standardized contracts).

JYP = 12.500.000 Yens= 1 Contract

EUR = 125.000 Euros= 1 Contract

GMP = 62.500 Pounds= 1 Contract

CHF = 125.000 Swiss Franc= 1 Contract

If the market participants require more quantity of currency should buy or sell more number of contracts in the Futures market.

Maturities of Futures

These futures contracts also have fixed maturities dates that start from 1 week and could have a maximum of 1 year depending of the daily electronic negotiation

1 week

1 month (30 Days)

3 months (90 Days)

ARTÍCULOS

REVISTA ECONOMICUS HETERO DOXUS

6 months (180 Days)

12 months (360 Days)

These future contracts have smaller counterparty risk than the normal Forward contracts because the trade is made only by the exchange members also must be registered in CFTC (Commodities Futures Trading Commission) as a FCM(Futures commission merchant). This commission impose strong minimum capital requirements for trade (Gert Bekaert, 2012).

The secondary market participants can access the market through the exchange members buying or selling Futures contracts. These secondary participants must deposit their monetary funds in to a margin account (is not a payment for the future contract), the amount deposited should be a percentage of the total contract and could be increased depend of the margin call⁴ requirements of the market.

The real cash flow of these contracts occur only at the maturity of the contract.

- Forward prices
- Exist to different forward prices
- Discount Froward
- Forward Premium

Discount Forward are cases when is possible purchase forwards in foreign currency as a higher price to the spot rate. It called also positive forwards discount.

Forward premium in foreign currency are the cases when the forward prices of foreign currency purchased for a lower price than the spot prices. These forwards are called also discount forwards on the domestic currency. It expressed with this following equation:

Equation 2 – Forward rate

$$\left[\frac{r-r^*}{1-r^*} \right] = \left[\frac{F-S}{S} \right]$$

r: domestic interest rate

r*: international interest rate

F: Forward price

S: Spot price

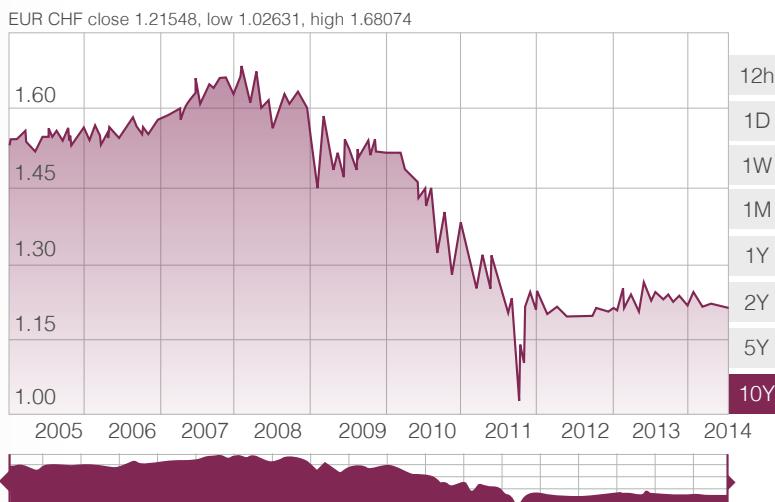
For the empirical analysis, I will use the series of market futures for 1 week, 1 month, 3 months, 6 months and 1 year of the Eur/Chf, but I will refer to these futures as forwards that is common used name at the market.

ACTUAL SITUATION IN SWITZERLAND AND MONETARY POLICY OF SNB

According to the Swiss National Bank -SNB, it has established floating (dirty floating) exchange rate conversion around of CHF 1.20 for euro as a minimum, but the Swiss Franc recognize

that in the spot market remain in a high value (Schweizerische National Bank, 2013) The SNB is manipulating his monetary policy to achieve the goal of the minimum exchange rate.

GRAPH No.17 The minimum exchange rate Eur/Chf⁵



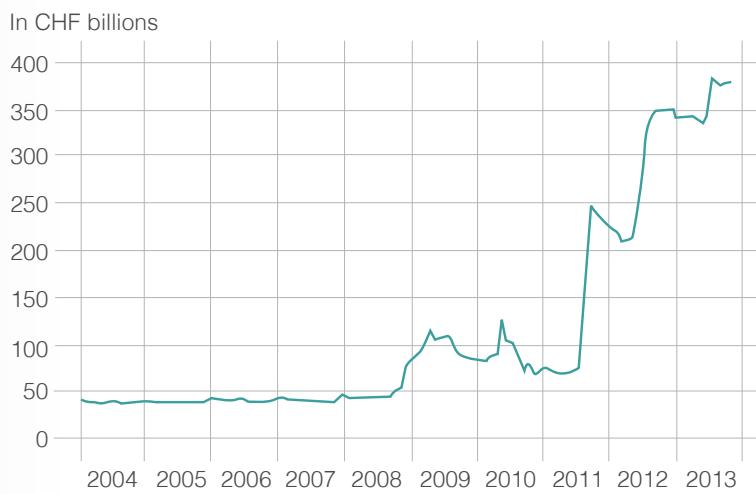
Nevertheless with the three-month Libor near zero level the manipulation of the interest rate (r) by monetary policy, will not be effective. The better option to maintain this minimum currency level, is to make interventions in the market. Buying foreign currency in unlimited quantities as is necessary, if the upward pressure of the market remain also the SNB will take further measures as needed.

The Growth of the monetary aggregates (M1, M2 and M3) was weak for the first semes-

ter 2013 this monetary base has seen almost no change since the monetary policy assessment in September 2012. The huge increase in the year 2011 was when the bank disclosure the new monetary policy to maintain the exchange rate in the objective levels of 1.20.

The increase of the year 2013 correspond granted a banking license. This meant that Post Finance's sight deposits held at the SNB became a part of the monetary base. The changes are in the following graph 19.

GRAPH No.18 Monetary Base⁶



5. <http://www.xe.com/currencycharts/?from=EUR&to=CHF&view=10Y>
6. Swiss National Bank, <http://www.snb.ch>

The movements in the monetary aggregates suffered considerable increases in the year 2011 with a small decrease at the end of the same year, in 2012 again is produced an increase of the monetary aggregates this increase in steps are part of the SNB's foreign exchange market interventions.

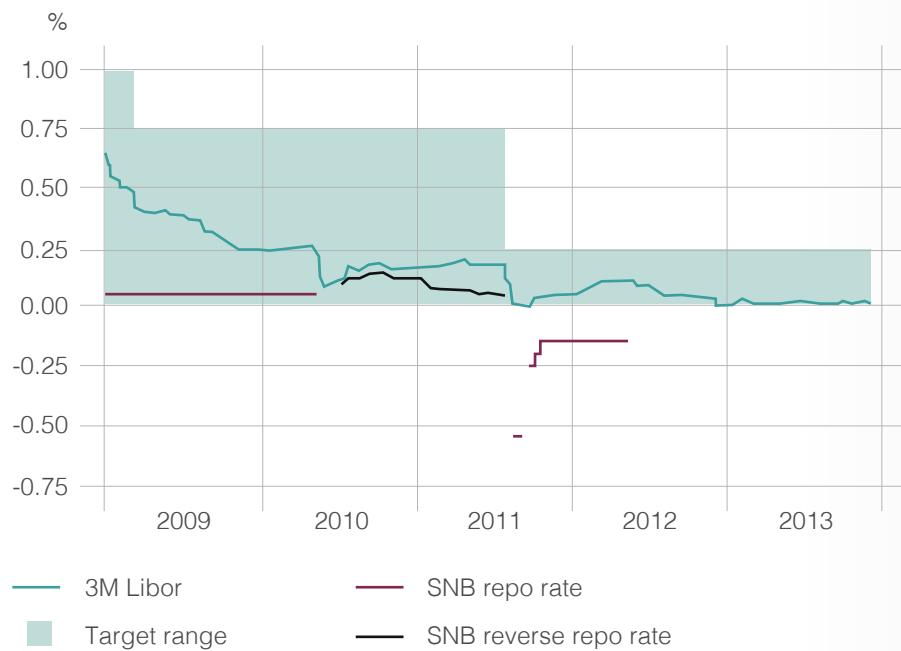
The Swiss economy have high levels of Liquidity, and lower levels of interest rate and inflation that is considerate something exceptional after an increase of the monetary base around 300% since 2011 as is possible to appreciate in the graph 19 of the monetary base.

Since 6th September 2011 the SNB maintained unchanged the monetary policy to set a minimum exchange rate of CHF 1.20 to the euro.

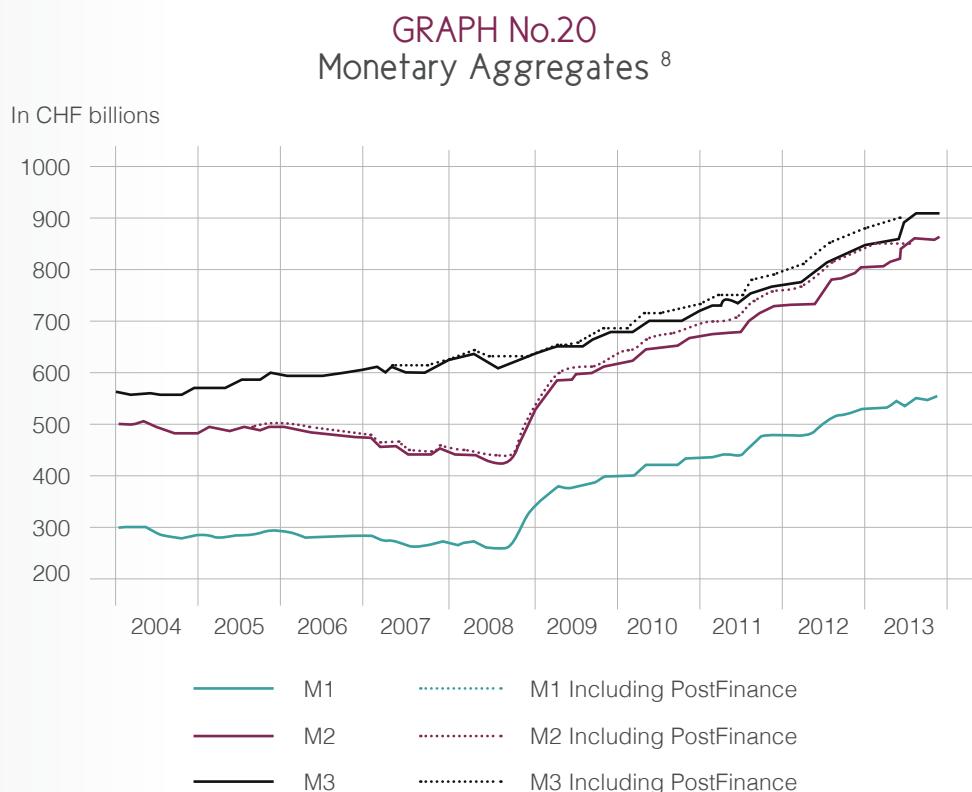
The central bank have narrow range for intervention with 3 months Libor to 0.0 – 0.25%. the sight deposits at the SNB virtually unchanged till 6 December 2013 with total sight deposits CHF 366.7 billion, from this quantity CHF 318.9 billion was deposits of domestic banks and the remaining CHF 49.7 billion by other sight deposits, the banks have a High level surplus reserves also the Statutory minimum reserves had an increase of 1.0% between 20 August and 19 November 2013. (Schweizerische National Bank, 2013).

The bank reserves have remained exceptionally high with an exceptional lower interest rate since 2010.

GRAPH No.19
Money Market Rates⁷

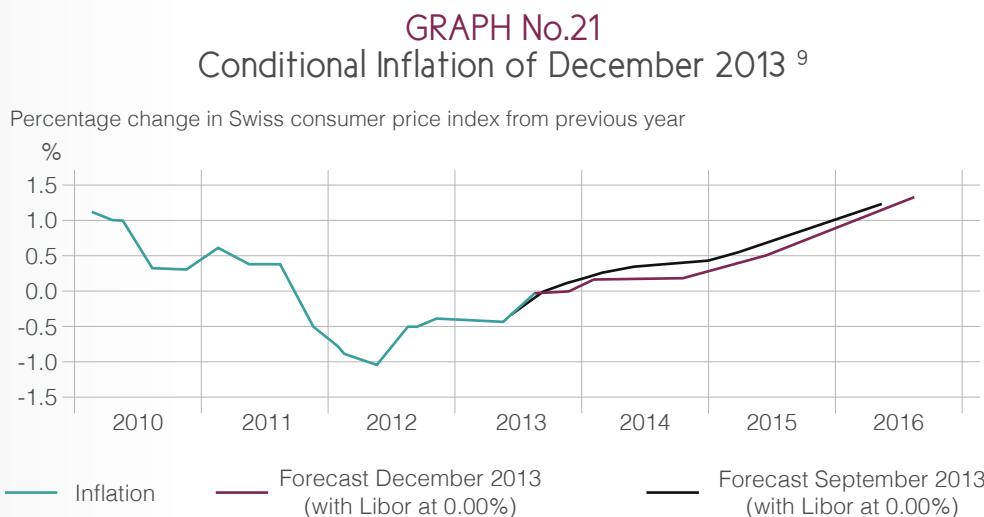


7. Source <http://www.Bloomberg.com>



For 2013, the SNB predicted an unaltered inflation rate of – 0.2%. For 2014 and 2015, the estimated inflation is lower in each one case by 0.1% because the prices of the oil and imported goods had a considerable reduction and the prices of the basics goods remain unchanged.

Thus, no inflation Risk recognized by Switzerland within a reasonable timeline frame. The forecast of the inflation will remain constant nearly to 0 under the actual globally circumstances also the inflationary expectations of the consumers remain low. But the risks continue inherent to a global economy shocks.



8. Swiss National Bank, <http://www.snb.ch/>

9. Swiss National Bank, <http://www.snb.ch/>

The Switzerland economy kept on developing positively in the second from last quarter. Be that as it may, there are signs that grow may debilitate incidentally in the final quarter of 2013. The SNB keeps on expecting rise of 1.5 – 2.0% what remains of 2013. For 2014, it expects a grow rate of around 2.0%. (Schweizerische National Bank, 2013)

The Swiss economy had a powerful export development, the exports got extraordinarily performance after the languid improvement in the past quarters. Especially in exports of chemicals and pharmaceuticals, accuracy instruments furthermore watches, and hardware. Export development was expanded to new markets, imports climbed just moderately. By and large, this came about in a remote exchange commitment to GDP development of 4.0% rate focuses in the second from last quarter.

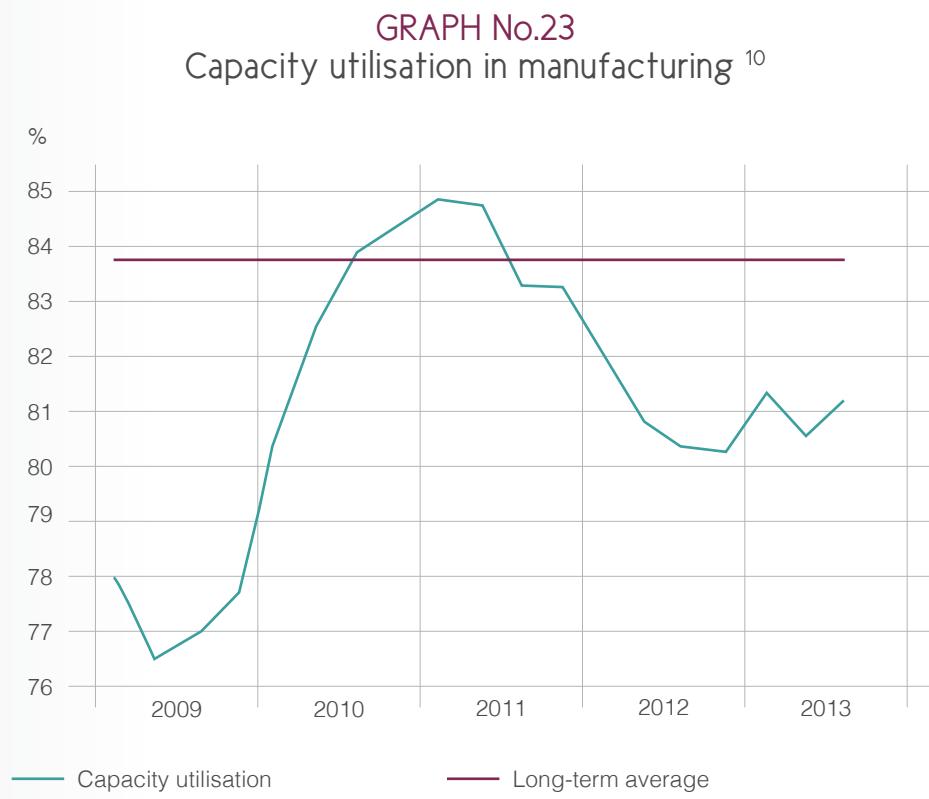
Investment in construction saw huge development in the second from last quarter 2013. Particularly in private residential real-estate, which is profiting from the blasting of home market, movement stayed at an extraordinary amount.

A special case was business and offices development, which was still experiencing the general financial vulnerability and signs of an over-supply, the capacity of utilization in construction had decline, but still remained at a very high level over the long term average of the country.

Nevertheless the manufacturing capacity utilization had a lower recovery, according to the survey conducted by KOF Swiss Economic Institute, utilization of technical capacity in manufacturing are above to 81.2% for 2013 but capacity utilization still well below its long-term average (Schweizerische National Bank, 2013) as we see in the next graph.

GRAPH No.22
Capacity utilisation in construction





Households demand is weak for the second from last quarter of 2013. Nevertheless still profiting from the large amount of migration in to the country, but private purchaser recorded a weaker level than in past quarters of 2013. This was a result of a decline in health care consumption, which had at one time climbed pointedly.

Gear venture was down somewhat in the third quarter, primarily because of a decrease in venture in airplane and volatility in another's business segments. (Schweizerische National Bank, 2013)

Into the labour market, the employment rate had a small decrease in the third

quarter but remain better if you make an international comparison. With a stagnating unemployment rate around 3.2%. The number of people registered for social aid in the employment offices only experimented seasonally changes. According to the employment statistics (ES) Switzerland will experiment a weak rise in employment for the next year.

In the next table we can see the real GDP and components of Switzerland and analyses the changes especially in the year 2011 that occur the exchange rate manipulation by SNB.

Growth rates on previous period in percent.

TABLE NO. 3

Gross Domestic Product of Switzerland

	2009		2010		2011		2012		2011		2012		2013
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<i>Private consumption</i>	1.8	1.7	1.1	2.4	2.8	4.0	0.6	2.8	3.3	2.3	2.2	0.8	
<i>Government consumption</i>	3.3	0.2	1.2	3.2	3.2	3.2	3.3	3.4	2.6	1.3	0.7	4.6	
<i>Investment in fixed assets</i>	-8.0	4.8	4.5	-0.4	4.6	-0.6	-3.0	-1.4	-0.1	-0.5	7.8	1.6	
<i>Construction</i>	3.0	3.5	2.5	-2.9	-3.7	-9.0	1.2	0.1	3.9	4.5	-0.1	4.0	
<i>Equipment</i>	-15.5	5.8	6.1	1.7	11.7	6.9	-6.1	-2.6	-3.2	-4.5	14.8	-0.3	
<i>Domestic final demand</i>	-0.4	2.2	1.8	1.8	3.2	2.8	0.1	1.9	2.4	1.6	3.3	1.4	
<i>Change in inventories 1</i>	0.1	0.8	-0.2	-0.1	-3.8	-0.2	0.6	-0.3	1.2	-2.5	2.0	-3.2	
<i>Total exports 2</i>	-7.3	7.4	3.8	2.0	8.4	5.5	-2.4	5.5	-1.6	1.0	-1.8	9.3	
<i>Goods 2</i>	-11.1	9.3	6.3	1.9	11.5	2.0	-3.1	7.3	-7.2	-0.6	-2.8	15.7	
<i>Services</i>	1.2	3.5	-1.6	2.4	1.5	14.1	-0.9	1.5	11.8	3.9	0.2	-2.4	
<i>Total imports 2</i>	-5.3	9.1	3.8	3.9	5.6	8.3	-0.7	2.7	3.6	-7.0	4.5	1.5	
<i>Goods 2</i>	-8.3	10.6	3.1	2.5	3.0	8.1	-2.7	3.3	-2.2	-6.4	5.2	3.0	
<i>Services</i>	9.0	3.0	6.8	9.4	16.7	9.2	7.7	0.7	28.6	-9.9	2.1	-3.7	
<i>Net exports 3</i>	-1.6	0.2	0.4	-0.5	1.9	-0.5	-0.9	1.6	-2.2	3.3	-2.7	4.0	
<i>GDP</i>	-1.9	3.0	1.8	1.0	1.0	1.9	-0.3	3.0	1.1	2.2	2.2	2.1	

1 Contribution to growth in percentage points
 2 Excluding valuables (precious metals, precious stones and gems as well as works of art and antiques).3 Contribution to growth in percentage points. Source: SECO¹¹

The real Swiss GDP expanded by 2.1%. Development was as solid as in the first semester of the year 2013, however, the domestic market decrease the speed. Manufactures sector increase the performance, but still weak compare with the Capacity utilization in the labour market the unemployment rate remained unaltered. The SNB keeps on anticipating GDP development of 1.5 – 2.0% for 2013 in general. According to the worldwide monetary expectations, GDP in Switzerland is prone to build by around 2% in 2014 (SECO, 2014).

The worldwide monetary recuperation stays weak. In numerous developed economies, space for maneuver in monetary policy is constantly compelled by the way that interest rates are now low and government deficits is high, making the worldwide economy particularly weak. Specially EUR/CHF.

Given the monetary circumstances, the external damage of the world economy still affecting Switzerland economy. In an environment of low interest rates, the threat of a further crisis up of irregular characteristics on home loan and land markets are high, the SNB keeps on monitoring the circumstances nearly on order to protect the economy.

According to the economic situation in Switzerland, we can affirm that several of the

Sample analysis

This empirical exercise applied the Spot price series of EUR/CHF (close price) since fourth of January 2000 (1/4/2000) still twenty two of July 2014 (7/22/2014), also I used the series of PIPS¹² prices (close price) for the futures of 1 week, 1 month, 3 months, 6 months and 12 months for the same time line. The data is available in the Bloomberg databases. In total are 3796 data for each of the 6 series, for a total of 22776 data.

Transform PIPS series

The first step was to transform the series expressed in PIPS to Forward prices, for each of these five series, the daily data forward of the was divided into 1000 and sum to the spot price of the respective day as is described in the following equation.

Equation 2 – Forward Price

$$\text{Forward price of } X_t = \left\{ \frac{\text{Pip price}_t}{1000} \right\} + \text{Spot price}_t$$

After these series transformation of the forward series all, the data expressed in market prices of the respective negotiation day. Required for my empirical analysis.

Software used

For the data analysis, I used the statistic program STATA (Statistics Data Analysis) that is a statistical software package that provides statistical analysis, graphics, simulations, regression analysis especially for the fields of economics¹³ and allow work with a considerable amount of data.

fundamental macroeconomic variables are constant or near to 0 this assumption is very important for the next empirical analyses because since September 2011 the Swiss central bank is maintaining a intervention in the exchange rate market, printing unlimited amounts of money in order to keep the exchange rate at the level of 1.2 Eur/Chf increasing the monetary mass M1 nearly to 300% as I show in the graph 14 without inflation are effects or effects in the mobility of capitals. That is something exceptional in an economy. Probably one of the reasons of this stability could be the control of the prices of the exchange rate by manipulations in the forward market.

For the next chapters we assume according to the reality of the Swiss economy

GDP = Constant Y

$r = 0$ (or nearly to 0)

$i = 0$ (or nearly to 0)

$XN = \text{Constant}$

Risk near to 0

Hypothesis

Hypothesis 1: The Spot rate Follow the Forward rate for the Eur/Chf market?

For the Forwards of

1 week

1 month (30 Days)

3 months (90 Days)

6 months (180 Days)

12 months (360 Days)

Hypothesis 2: Is possible to find statistical evidence that the forward market was manipulated to arrange the spot rate Eur/Chf in a target zone after the year 2011?

Statistical data analysis

The core of this analysis is to find empirical evidence of currency manipulation by the Switzerland central bank trough interventions in the Forward market and show how this manipulation is affecting the spot rate of the Swiss Franc.

12. The smallest price change that a given exchange rate can make

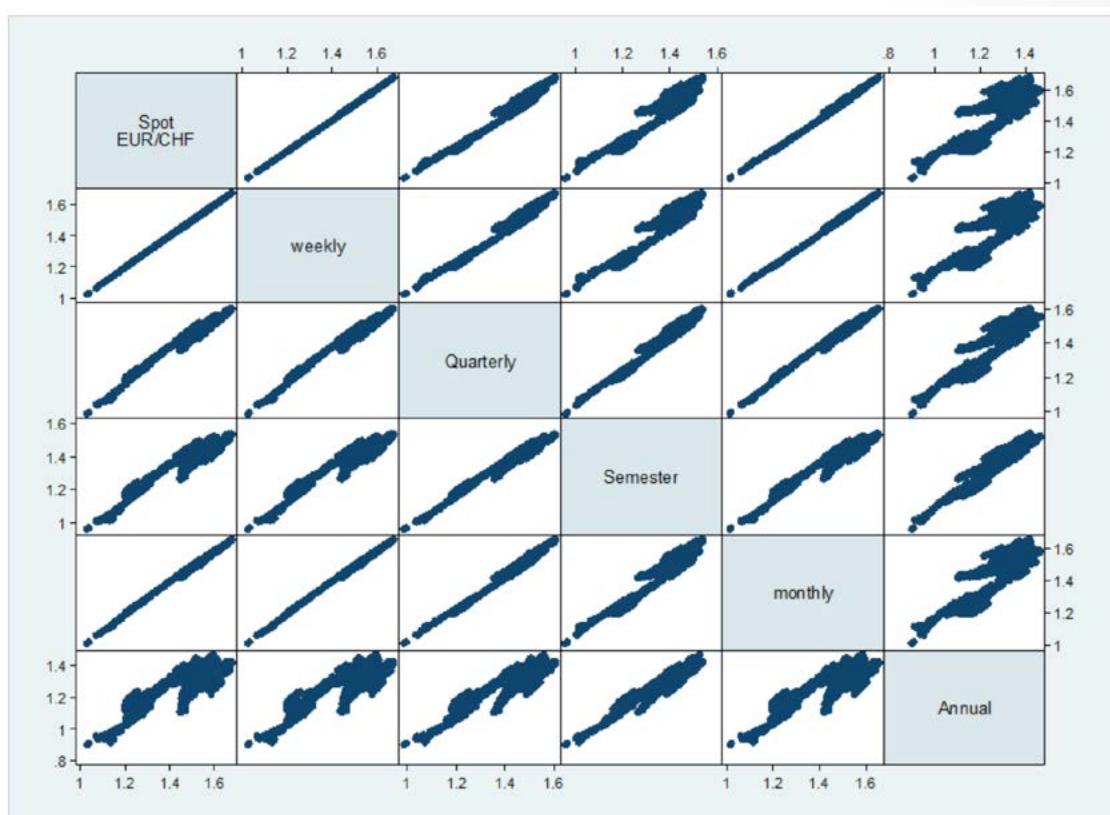
13. <http://www.stata.com/>

Graph data analysis

The first analysis was to make a dispersion graphic that also allows observe the

degree of dispersion of the series. If have a lower degree of dispersion the series have high correlation. With a high degree of dispersion, the series have low correlation.

GRAPH No.24
Degree of dispersion



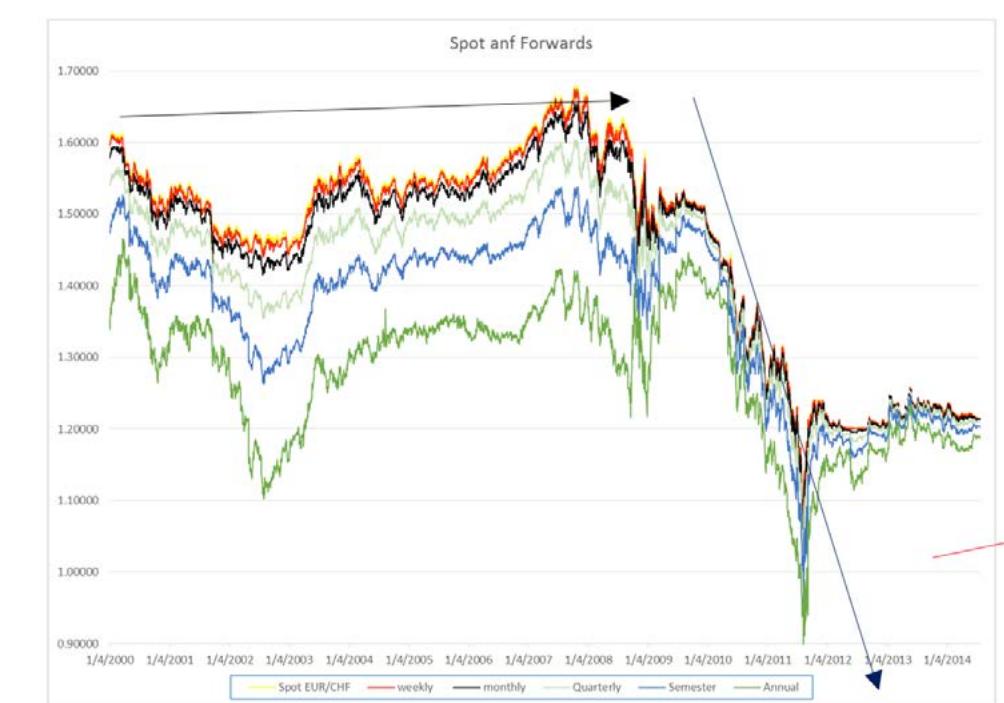
According to the graph the series that show low dispersion degree respect to the Spot series are:

- Weekly forward
- Monthly forward

The series with a higher degree of dispersion are:

- Semester forward
- Annual forward
- Graph of the spot and the forward series

GRAPH No.25 Spot and Forward Market



The analysis of the graph show three (3) prices tendencies that are marked with colour arrows. The first black arrow is a lateral tendency between 1.4 to 1.6 Swiss Franc per euro, the blue arrow show a decreasing tendency since 1.7 till 0.9 Swiss Franc per euro, and the red arrow show a lateral tendency around 1.5 to 1.25 Swiss Franc per euro.

The variables that have very similar behaviour to the Spot rate across the time are weekly and monthly. In the last part (red arrow zone) the tendency of Quarterly forward start to have very tide similarity with the spot rate.

ARIMA analysis of the complete series.

The second analysis was to establish an ARIMA regression. An ARIMA model or au-

toregressive integrated moving average is a regression model developed by Box and Jenkins, used to analyse the dependence between the data series. The series modelled according to the previous values in an explicit model. (Fernandez, 2014) This method allows describing one value in a linear function of the previous data and diagnosing the correlation. Can include cycle components. Is useful to forecast time series.

The first step was to transform the series to observe the correlation. I applied natural logarithm to each one of the variables, this allow to see the changes of the series in percentage also allow to observe the Beta value for each of the forward series.

After run the model with the program Stata was obtained the following results.

TABLE NO.4
Results ARIMA regression

ARIMA regression

Sample: 1/4/2000 - 7/22/2014, but with gaps Number of obs = 3796
 Wald chi2(12) = 2.20e+06
 Log likelihood = 24894.78 Prob > chi2 = 0.0000

		OPG				
		Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
lspot	trend	-9.98e-07	2.42e-07	-4.12	0.000	-1.47e-06 -5.23e-07
	d_11	.0038728	.0061925	0.63	0.532	-.0082642 .0160098
	bp_11	-1.48e-06	2.02e-06	-0.73	0.463	-5.44e-06 2.48e-06
	lw	.8346631	.003002	278.04	0.000	.8287794 .8405469
	lm	.1603262	.0034065	47.07	0.000	.1536497 .1670028
	lq	.0379325	.003681	10.30	0.000	.0307179 .0451472
	ls	-.0305828	.00351	-8.71	0.000	-.0374622 -.0237034
	la	-.0097172	.0014222	-6.83	0.000	-.0125046 -.0069297
	_cons	.0065973	.0005606	11.77	0.000	.0054986 .007696
ARMA	ar					
	L1.	.9152351	.0049783	183.84	0.000	.9054777 .9249924
	L7.	.0655765	.0046266	14.17	0.000	.0565086 .0746445
	ma					
	L1.	-.3049384	.0114538	-26.62	0.000	-.3273874 -.2824894
	L14.	.0852768	.0084791	10.06	0.000	.068658 .1018955
	/sigma	.0003242	1.40e-06	231.52	0.000	.0003214 .0003269

Note: The test of the variance against zero is one sided, and the two-sided confidence interval is truncated at zero.

This econometric model show that is a negative tendency during the complete time series with a small structural change at the end of the series. This change is not so relevant statistically; in practical terms the model

predict that, the spot series require more time to consolidate the slope of the correction tendency. This behaviour coincide with the Spot graphic series; the model show a high sensibility for the short run.



According to the interpretation of the model, the series of Forward prices of 1 week and one month determine the behaviour of the Spot series, the series of quarterly, semester and annual have influence in the determination of the Spot price, but their influence is marginal. The component of the residues indicate the deviation of prices depend strongly on the last price and the last week prices period 0.9152351 meaning that the first negotiation of this week have a degree of association with the first negotiation of the last week (are affected weekly). The moving average component indicate an incorporation of the shocks in the prices in two periods.

After a shock in the prices occur a period of down prices, but after 14 days will be a new cycle of increasing prices.

The model cannot explain perfectly all the series because of the different tendencies during the last 14 years. Also, provide not clear information about the coefficients and the dependency of the variables across the time. To search a solution I will divide the series in 3 groups to make a better analysis.

The first group correspond to the data from fourth of January 2000 till thirty of September 2008 that is when the Subprime crisis form USA started. The second group data is from first of October 2008 till fifth of September 2011 that the next day the SNB announce the intervention in the market to maintain the exchange rate around 1.20. And the last group from sixth of September 2011 till the end of the series on twenty two of July 2014.

The three groups are at the next table.

TABLE NO. 5
Available Data

Group	Number of data
From 1/4/2000 Till 9/30/2008	2281 observations
From 10/1/2008 Till 9/5/2011	764 observations
From 9/6/2011 Till 7/22/2014	751 observations

The objective of this division is to measure the correlation of the variables after the central bank of Switzerland announced the intervention of the currency to protect the Swiss economy.

GRAPH No.27
Analysis of the group 1



The graph 28 show a lateral tendency with a peak near to 1.69 Swiss Francs per Euro in the year 2008, the forwards of 1 year and 1 semester have a big deviation respect to the Spot rate, also show that the Spot rate is higher in the majority of time that the forwards of 1 week and 1 month.

The behaviour of these series correspond

a normal markets fluctuations without strong or structural shocks with periods of medium volatility, for graph analysis the forward of one year predict strong expectations by the participants of the market about an appreciation of the Swiss franc in long-run, also this expectations could be produced by differential in interest rate levels.

GRAPH No.28

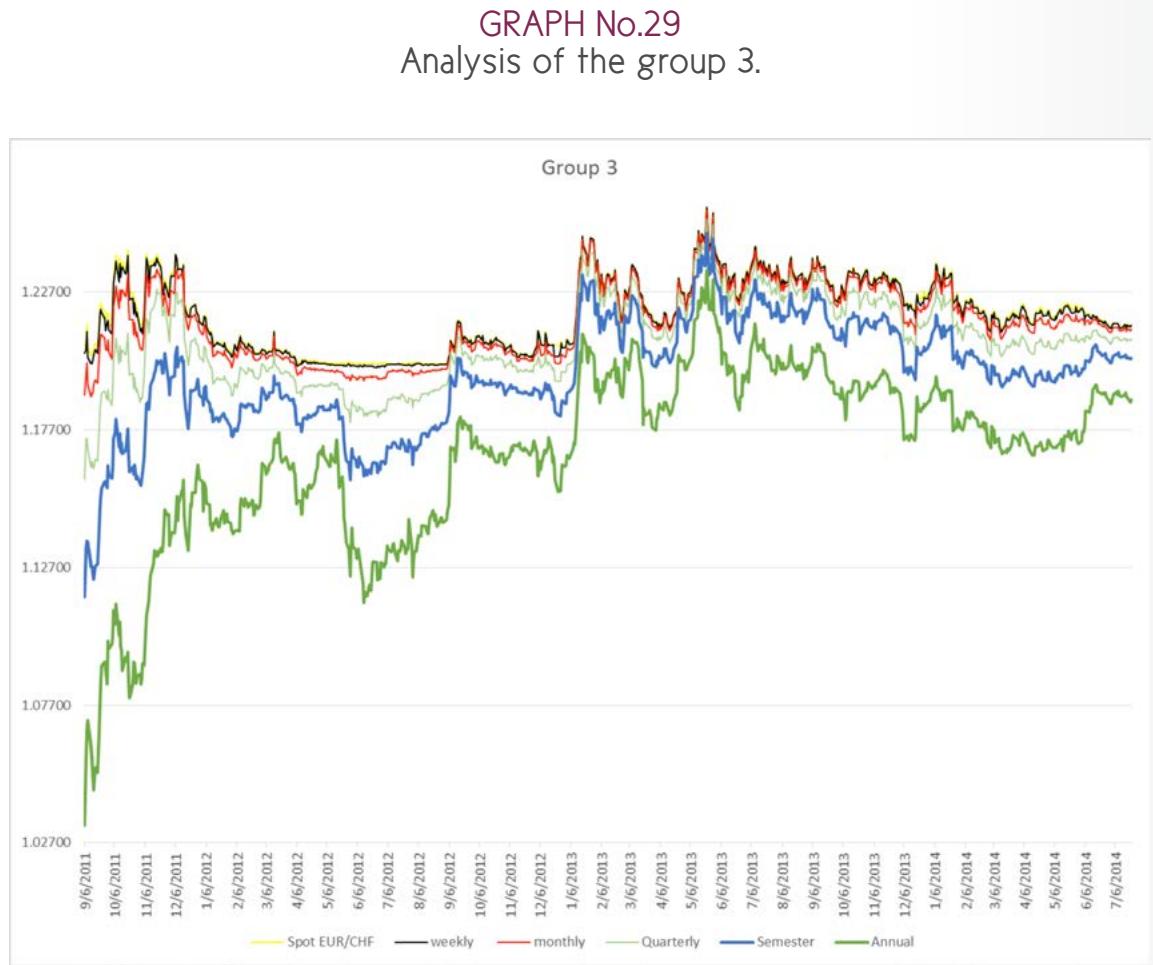
Analysis of the group 2.



The graph 29 show a decreasing tendency with a bottom around 0.9 Swiss Francs per Euro for the 1 year forward. The bottom spot rate is approximately 1 Eur/Chf in August 2011 with an appreciation approximately of 62.5% respect to the higher peak.

Is a reduction of the deviation of the forwards Semester and Annual respect to the Spot rate also show that Weekly forward is higher in the majority of the time that the Spot rate and forward of 1 month.

This decreasing tendency is associate to the subprime crisis in the markets of USA that was extended to the world financial markets, the actors of the market searched for refugee in another depositary currency markets that are considerate low risk as the Swiss economy. This constant inflow of capital during 3 years produced the strong appreciation of the Swiss Franc still levels of the parity with the Euro harming the export sector of Swiss economy.



The graph 30 show an increasing tendency till December 2011 (appreciation) and after show a lateral tendency around 1.2 Swiss Francs per Euro. For the 1 semester and 1 year forward the deviation with spot rate had reduce significantly the forwards of 1 week, 1 month and quarterly are very tide with the Spot rate.

Also is possible to observe that since March 2012 to September 2012 do not have almost volatility in Spot, weekly and monthly forward.

In this Group 3 is possible to observe the continues intervention of the SNB in to exchange rate market, after the open disclosure of the foreign policy the Eur/Chf market suffered a strong depreciation since levels of parity to finally locate levels of 1.2 (20% depreciation).

The finality of these interventions by the SNB was to protect the export sector of the

Swiss economy also reduce the volatility of the market because the Eur/Chf don't have strong variation after reached the exchange rate goal of SNB.

VAR analysis. [T2]

Analysis VAR or Vector Auto Regression Model is a model used for the analysis of multivariate time series. The model has proven to be especially useful for describing the dynamic behaviour of economic and financial time series and for forecasting. The model elaborate theory-based simultaneous equations, also used for structural inference and policy analysis. (Washington, 2014)

After divide the series in groups, I applied a VAR analysis to each of the three groups with the objective to observe the correlation of the variables across the time, making a

focus in R-sq. values that will provide a trace of which variables are explaining the model across the time, and trying to search causality of the variables.

For the causality of variables was applied Granger coefficient test to the VAR analysis this test allow to measure the dependency between two variables.

TABLE NO.6
Analysis group 1.

Vector autoregression					
Sample: 01/06/2000 - 09/26/2008, but with gaps					
Log likelihood =	40967.06		No. of obs	=	1367
FPE	= 4.21e-34		AIC	=	-59.82305
Det(Sigma_ml) =	3.76e-34		HQIC	=	-59.71157
			SBIC	=	-59.52518
Equation	Parms	RMSE	R-sq	chi2	P>chi2
SpotEURCHF	13	.003896	0.9949	266349.5	0.0000
weekly	13	.003911	0.9949	265085.4	0.0000
monthly	13	.00398	0.9947	258605.1	0.0000
Quarterly	13	.004063	0.9947	257095.9	0.0000
Semester	13	.004466	0.9943	237209.3	0.0000
Annual	13	.006303	0.9916	160766.2	0.0000

After realize a VAR analysis, we can observe on the table 6 that the component of R-sq. have the higher values on the variables Spot and Weekly forward (0.9949), these values affirm that the performance of all of these6 series can be

explained by the behaviour of these two variables.

The variables Spot and Weekly have a higher level of independency suggest that the dependent variables are Quarterly, Semester, and Annual for this period.

TABLE NO.7
Analysis group 2

Vector autoregression					
Sample: 10/03/2008 - 09/02/2011, but with gaps					
Log likelihood =	13170.77		No. of obs	=	457
FPE	= 5.26e-33		AIC	=	-57.29877
Det(Sigma_ml) =	3.74e-33		HQIC	=	-57.02147
			SBIC	=	-56.59477
Equation	Parms	RMSE	R-sq	chi2	P>chi2
SpotEURCHF	13	.008998	0.9945	82220.53	0.0000
weekly	13	.008978	0.9945	82411.46	0.0000
monthly	13	.00905	0.9944	81470.37	0.0000
Quarterly	13	.009325	0.9942	78701.95	0.0000
Semester	13	.009371	0.9945	83385.38	0.0000
Annual	13	.010038	0.9945	82544.57	0.0000

On the table 9 the VAR analysis, show that the component of R-sq. have the higher values on the variables Spot and Weekly and Semester forwards (0.9945), these values affirm that the performance of all of these series can be explained by the behaviour of these three variables the other variables explain the model buy in a lower scale.

TABLE NO.8
Analysis group 3

Vector autoregression					
Sample: 09/08/2011 - 07/18/2014, but with gaps					
			No. of obs	=	449
Log likelihood	=	15663.92	AIC	=	-69.42504
FPE	=	2.85e-38	HQIC	=	-69.14381
Det(Sigma_ml)	=	2.01e-38	SBIC	=	-68.71157
Equation	Parms	RMSE	R-sq	chi2	P>chi2
SpotEURCHF	13	.002577	0.9613	11145.73	0.0000
weekly	13	.002595	0.9609	11033.08	0.0000
monthly	13	.002608	0.9626	11563.28	0.0000
Quarterly	13	.002672	0.9703	14661.83	0.0000
Semester	13	.002899	0.9787	20619.56	0.0000
Annual	13	.003866	0.9850	29535.98	0.0000

On the VAR analysis of the third group, show a change in the component of R-sq. The higher value are now on the variable Annual forward (0.9850), this value affirm that the performance of all of these 6 series can be explained better by the behaviour of Annual variable. In this case the Forward variables of Semester, Quarterly and monthly start to gain importance in the explanation of the model and the Spot variable change to be more dependent with the second lower value of R-sq.

In this model can affirm that something affect the series, that the Spot variable lose his independency.

Price-Winsten regression

For the total sample of the series and the groups 1,2,3 I made a Price-Winsten regression with the logarithms of the variables to measure an elasticity of the Forwards respect to the Spot the objective is to determinate how the coefficients of the forwards change across the time and how they affect the spot rate.

TABLE NO.9

Regression Prais-Winsten for the entire sample.

Prais-Winsten AR(1) regression -- iterated estimates

Source	SS	df	MS	Number of obs	=	3796
Model	23.0895962	5	4.61791924	F(5, 3790)	=	.
Residual	.00052882	3790	1.3953e-07	Prob > F	=	0.0000
Total	23.090125	3795	.006084354	R-squared	=	1.0000
				Adj R-squared	=	1.0000
				Root MSE	=	.00037
<hr/>						
lspot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lw	.9376361	.0064135	146.20	0.000	.925062	.9502103
lm	.1480561	.0086464	17.12	0.000	.1311041	.1650081
lq	-.0244178	.007403	-3.30	0.001	-.0389321	-.0099035
ls	-.0739346	.0053973	-13.70	0.000	-.0845165	-.0633527
la	.0136585	.0016308	8.38	0.000	.0104611	.0168559
_cons	-.0002904	.0000511	-5.68	0.000	-.0003906	-.0001902
<hr/>						
rho	.650033					
<hr/>						

In this table, we should focus on the coefficients with the objective to compare with the different groups.

TABLE NO.10
Regression Prais-Winsten for Group 1

Prais-Winsten AR(1) regression -- iterated estimates

Source	SS	df	MS	Number of obs	=	2281
Model	11.0824767	5	2.21649534	F(5, 2275)	=	.
Residual	.000350486	2275	1.5406e-07	Prob > F	=	0.0000
Total	11.0828272	2280	.004860889	R-squared	=	1.0000
				Adj R-squared	=	1.0000
				Root MSE	=	.00039
<hr/>						
lspot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lw	.9440449	.0087983	107.30	0.000	.9267915	.9612984
lm	.1120621	.0104771	10.70	0.000	.0915164	.1326079
lq	-.0112241	.009621	-1.17	0.243	-.0300911	.0076428
ls	-.0529592	.0068187	-7.77	0.000	-.0663307	-.0395877
la	.0047159	.0022192	2.13	0.034	.0003641	.0090676
_cons	.0020207	.0002128	9.50	0.000	.0016034	.002438
<hr/>						
rho	.5394909					
<hr/>						
Durbin-Watson statistic (original)	0.952052					
Durbin-Watson statistic (transformed)	1.677484					

The regression on the table 10 show that the coefficients change marginally, in compare with the total sample of the series, additional for this period the Quarterly forward lose statistical significance, meaning that

this variable don't make any influence on determination of the Spot prices (Lspot).

According to the coefficients of the model in the table 10, the elasticity of the variables are:

TABLE NO.11
Elasticity respect the Spot Rate (Group 1)

Variable Elasticity	Elasticity respect the Spot Rate	Type of correlation
Weekly	A change of 1% in forward will increase the Spot rate in 0.94%	Direct
Monthly	A change of 1% in forward will increase the Spot rate in 0.112%	Direct
Quarterly	A change of 1% in forward will decrease the Spot rate in -0.011%	Inverse
Semester	A change of 1% in forward will decrease the Spot rate in -0.052 %	Inverse
Annual	A change of 1% in forward will increase the Spot rate in 0.004%	Direct

TABLE NO.12
Regression Prais-Winsten for Group 2

Prais-Winsten AR(1) regression -- iterated estimates						
Source	SS	df	MS	Number of obs = 764		
Model	3.19919681	5	.639839362	F(5, 758) = .		
Residual	.000118774	758	1.5669e-07	Prob > F = 0.0000		
Total	3.19931558	763	.004193074	R-squared = 1.0000		
				Adj R-squared = 1.0000		
				Root MSE = .0004		
lspot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lw	.900677	.0140742	64.00	0.000	.8730481	.928306
lm	.1807665	.0216613	8.35	0.000	.1382433	.2232897
lq	.008973	.0162456	0.55	0.581	-.0229187	.0408646
ls	-.1144569	.011012	-10.39	0.000	-.1360746	-.0928393
la	.0252473	.0035543	7.10	0.000	.0182698	.0322248
_cons	-.000307	.0002281	-1.35	0.179	-.0007547	.0001407
rho	.7514534					
Durbin-Watson statistic (original) 0.578190						
Durbin-Watson statistic (transformed) 1.442245						

The regression on the table 11 show that the coefficients continue showing a marginal change in coefficients, in this period the variable Quarterly forward lose statistical significance, meaning that this variable

don't make any influence on the determination of the Spot prices (Lspot).

According to the coefficients of the model, the elasticity of the variables are:

TABLE NO.13
Elasticity respect the Spot Rate (Group 2)

Variable Elasticity	Elasticity respect the Spot Rate	Type of correlation
Weekly	A change of 1% in forward will increase the Spot rate in 0.90%	Direct
Monthly	A change of 1% in forward will increase the Spot rate in 0.18%	Direct
Quarterly	A change of 1% in forward will increase the Spot rate in 0.08%	Direct
Semester	A change of 1% in forward will decrease the Spot rate in -0.11 %	Inverse
Annual	A change of 1% in forward will increase the Spot rate in 0.025%	Direct

TABLE NO.14
Regression Prais-Winsten for Group 3

Prais-Winsten AR(1) regression -- iterated estimates

Source	ss	df	MS	Number of obs	=	751
Model	.579212949	5	.11584259	F(5,	745) = .
Residual	.000025798	745	3.4629e-08	Prob > F	=	0.0000
Total	.579238747	750	.000772318	R-squared	=	1.0000
				Adj R-squared	=	1.0000
				Root MSE	=	.00019
lspot	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lw	.810962	.0166235	48.78	0.000	.7783276	.8435965
lm	.2141737	.0243169	8.81	0.000	.1664359	.2619116
lq	.0422907	.0224216	1.89	0.060	-.0017264	.0863078
ls	-.0731052	.0174062	-4.20	0.000	-.1072762	-.0389342
la	-.0003438	.004994	-0.07	0.945	-.0101478	.0094602
_cons	.0011992	.0004506	2.66	0.008	.0003147	.0020838
rho	.8873776					

The regression on the table 14 show that the coefficients have a structural change, in this period the variable Annual forward lose statistical significance, meaning that this

variable don't make any influence on the determination of the Spot prices (Lspot).

According to the coefficients (Coef.) of the model, the elasticity of the variables are:

TABLE NO.15
Elasticity respect the Spot Rate (Group 3)

Variable	Elasticity respect the Spot Rate	Type of correlation
Weekly	A change of 1% in forward will increase the Spot rate in 0.81%	Direct
Monthly	A change of 1% in forward will increase the Spot rate in 0.21%	Direct
Quarterly	A change of 1% in forward will increase the Spot rate in 0.042%	Direct
Semester	A change of 1% in forward will decrease the Spot rate in - 0.073 %	Inverse
Annual	A change of 1% in forward will decrease the Spot rate in - 0.0003%	Inverse

To prove that the coefficients change across the different groups I made an F test that measure the structural changes in coefficients with the following equation:

Equation 3 – Structural Changes

$$F = \frac{(SSR - SSR1 - SSR2)/n}{(SSR1 + SSR2)/(T-2n)}$$

TABLE NO.16
Results of the structural changes

F TEST (MEASURE OF THE STRUCTURAL CHANGES)	
SSR	0.000528820
SSR1	0.000350486
SSR2	0.000118774
SSR3	0.000025798
Sum of SSR of the three groups	0.000495058
SSR- Total Diference	0.000033762
Variables n	6
2n	12
3n	18
Total Data	3796
Total Data - 2n	3778
SSR- Total Diference / 2n	0.0000028135
Sum of SSR of the three groups / (Total Data - 2n)	0.0000001310
F = [(SSR- Total Diference / 2n) / (Sum of SSR of the three groups / {Total Data - 2n})]	21.47

According to the F coefficient test is the following hypothesis:

H_0 = the coefficients are equals

For the F values superior to 2 the Hypothesis should be rejected. After apply the formula on the table 16 was obtained an F value of 24.47. This value is superior of 2 we should reject the hypothesis and affirm that the coefficients in the 3 groups are different.

The meaning of this is that the different variables I_w , I_m , I_q , I_s and I_a had different effects on Spot variable across the total sample

Granger analysis

After realize a VAR analysis is possible to determinate the causality of the variables making a Granger causality test between variables.

According to Granger causality test applied in this software, we should establish one hypothesis

H_0 : B variable don't cause A variable

In this table of analysis, B variable is located in the column of "Excluded" and A variable is located in the column of "Equation". Now we should locate and analyse the row with P value. ($\text{Prob} > \chi^2$) P value smaller than 0.05 (Lower than 5%) is statistically significant and we should regret H_0 .

TABLE NO.17
Granger test

Granger causality wald tests

Equation	Excluded	chi 2	df	Prob > ch12
A	B		2	SMALLER 'P' VALUE
	all		2	

Now made a VAR regression analysis of the three different groups. After this analysis, I applied Granger causality test for each of the model variables. The objective

was to determinate the causality between them, trying to observe which variables are dependent or independent I obtained the following results.

TABLE NO.18
Group 1

. vargranger

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
SpotEURCHF	weekly	2.8455	2	0.241
SpotEURCHF	monthly	2.0431	2	0.360
SpotEURCHF	Quarterly	.7686	2	0.681
SpotEURCHF	Semester	.07436	2	0.964
SpotEURCHF	Annual	4.1535	2	0.125
SpotEURCHF	ALL	16.794	10	0.079

According to Granger Causality test (table 18) each one of the Forward variables individually don't cause the Spot Variable, Spot variable is causing weekly variable. Weekly forward cause quarterly and semester variable.

weekly	SpotEURCHF	18.149	2	0.000
weekly	monthly	4.7647	2	0.092
weekly	Quarterly	.75554	2	0.685
weekly	Semester	.00824	2	0.996
weekly	Annual	3.3776	2	0.185
weekly	ALL	33.555	10	0.000
monthly	SpotEURCHF	1.3908	2	0.499
monthly	weekly	2.6448	2	0.266
monthly	Quarterly	5.7991	2	0.055
monthly	Semester	.3621	2	0.834
monthly	Annual	2.978	2	0.226
monthly	ALL	55.295	10	0.000
Quarterly	SpotEURCHF	.49444	2	0.781
Quarterly	weekly	8.589	2	0.014
Quarterly	monthly	5.4426	2	0.066
Quarterly	Semester	8.086	2	0.018
Quarterly	Annual	3.2607	2	0.196
Quarterly	ALL	50.613	10	0.000
Semester	SpotEURCHF	.54515	2	0.761
Semester	weekly	8.5932	2	0.014
Semester	monthly	1.7677	2	0.413
Semester	Quarterly	3.2932	2	0.193
Semester	Annual	2.2744	2	0.321
Semester	ALL	45.315	10	0.000
Annual	SpotEURCHF	.68873	2	0.709
Annual	weekly	2.307	2	0.316
Annual	monthly	6.1696	2	0.046
Annual	Quarterly	3.394	2	0.183
Annual	Semester	17.881	2	0.000
Annual	ALL	52.727	10	0.000

TABLE NO.19
Group 2

Vargranger Group 2

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
lspot	lw	1.0987	1	0.295
lspot	lm	1.8651	1	0.172
lspot	lq	1.4639	1	0.226
lspot	ls	1.8609	1	0.173
lspot	la	.00873	1	0.926
lspot	ALL	11.099	5	0.049
lw	lspot	.05275	1	0.818
lw	lm	1.7637	1	0.184
lw	lq	1.2366	1	0.266
lw	ls	1.9106	1	0.167
lw	la	.02652	1	0.871
lw	ALL	10.391	5	0.065
lm	lspot	6.3586	1	0.012
lm	lw	15.571	1	0.000
lm	lq	.86123	1	0.353
lm	ls	2.5192	1	0.112
lm	la	.10673	1	0.744
lm	ALL	30.12	5	0.000
lq	lspot	23.888	1	0.000
lq	lw	34.943	1	0.000
lq	lm	5.1316	1	0.023
lq	ls	4.7532	1	0.029
lq	la	.20584	1	0.650
lq	ALL	47.81	5	0.000
ls	lspot	36.706	1	0.000
ls	lw	47.308	1	0.000
ls	lm	6.9998	1	0.008
ls	lq	.53822	1	0.463
ls	la	.81588	1	0.366
ls	ALL	49.584	5	0.000
la	lspot	50.702	1	0.000
la	lw	60.735	1	0.000
la	lm	4.9564	1	0.026
la	lq	3.0442	1	0.081
la	ls	1.2557	1	0.262
la	ALL	66.581	5	0.000

No.2

ARTÍCULOS

REVISTA ECONOMICUS HETERODOXUS

In this test the L spot variable don't cause individually the forward values but in the whole model the Forward cause spot values, Lw don't cause any series in granger criteria, the Lm variable cause L spot and Lw. The Quarterly cause all the variables

with exception of annual variable, Semester variable cause all the variables except Annual and Quarterly. Finally Annual variable cause all the variables except Quarterly and Semester according to Granger causality test.

TABLE NO.20
Group 3

Vargranger Group 3

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
lspot	lw	9.6359	1	0.002
lspot	lm	7.6389	1	0.006
lspot	lq	22.258	1	0.000
lspot	ls	24.713	1	0.000
lspot	la	12.595	1	0.000
lspot	ALL	89.931	5	0.000
lw	lspot	.22953	1	0.632
lw	lm	6.8999	1	0.009
lw	lq	22.059	1	0.000
lw	ls	24.873	1	0.000
lw	la	12.851	1	0.000
lw	ALL	84.009	5	0.000
lm	lspot	3.642	1	0.056
lm	lw	18.817	1	0.000
lm	lq	24.181	1	0.000
lm	ls	27.397	1	0.000
lm	la	14.059	1	0.000
lm	ALL	95.502	5	0.000
lq	lspot	6.623	1	0.010
lq	lw	23.195	1	0.000
lq	lm	8.6134	1	0.003
lq	ls	31.218	1	0.000
lq	la	16.398	1	0.000
lq	ALL	89.048	5	0.000
ls	lspot	8.9018	1	0.003
ls	lw	26.057	1	0.000
ls	lm	11.355	1	0.001
ls	lq	17.957	1	0.000
ls	la	9.8912	1	0.002
ls	ALL	80.514	5	0.000
la	lspot	11.502	1	0.001
la	lw	26.771	1	0.000
la	lm	10.881	1	0.001
la	lq	10.889	1	0.001
la	ls	13.512	1	0.000
la	ALL	74.753	5	0.000

According to Granger Causality (table 20) all the variables are associated with their past value and Granger test show causality. Each one of the Forward variables are causing the Spot Variable also show that in the model the

variables collectively are causing Spot variable Lspot variable also have incidence in the causality of all Forward variables. The forwards Quarterly, Semester and Annual have Granger causality with all the another variables.

CONCLUSIONS

I conclude that in the Swiss economy is happening something exceptional, this economy is having the impossible trinity, described in this document before. This is considerate for the theory economists something impossible, but Switzerland is having free movements of capital plus an autonomic monetary policy and the SNB have fixed (dirty float) the exchange rate into the level 1.2 Swiss Franc per 1 Euro. This exceptional case show that is possible that SNB is using not conventional methods to control the exchange rate and keep the impossible trinity.

According to the empirical analysis the statistical evidence, show 3 different slopes on the analysed series, also the F test show that the series have a structural change in their coefficients in the three different groups. It means that across the time the relation between the Spot prices and Forwards prices (Weekly, Monthly, Quarterly, Semester and Annual) have different degree of affectation. The first ARIMA analysis of the complete sample prove that the Weekly, and monthly forwards had an incidence on the prices determination of the spot variable. That show the degree of manipulation that the Forward market could make to the Spot market. However, manipulate the Forward market only will be possible by a huge entity that have the unlimited financial assets to change the forward prices and therefore the Spot prices. I presume that this entity is the Swiss National Bank (SNB), because is the only market participant with enough strength and interest to set the Forward prices in to certain level.

The analysis by group's shows that exist structural changes between the groups 1, 2

and 3. These changes reflected the relation of Forwards and spot prices. According to the frame of time the elasticity between the variables change.

The answer to the first hypothesis is yes. The Spot rate is following the Forward rate for the Eur/Chf market, but only in the time frame of the group 3 the period comprehended from 6th September 2010 till 22nd of July 2014. The Granger causality tests show that the Forwards of 1 week, 1 month, 3 months, 6 months and 12 months are causing the Spot prices.

For the groups 1 and 2 comprehended from 4th January 2000 till 5th September 2011 the Granger causality test shows that the forwards prices don't cause the Spot prices. In this frame of time I must reject the hypothesis.

In the second group is an interesting fact. According to Granger causality test the Forwards individually don't cause the Spot, but when this test is applied to the complete model the Forwards have a causality of the spot value. This could mean that in this frame of time the market experimented spontaneous interventions by the SNB.

The answer for the second Hypothesis is yes, is statistical evidence of manipulation of the Forward market after the intervention by the SNB on September 2011 (group 3), the first evidence is a structural change in the coefficients that relate the prices of the Spot and Forwards. Also the regression show a highly dependence between the weekly forward and the spot rate. Nevertheless according to the Granger causality test after 2011 the Quarterly, Semester and Annual Forwards are causing the whole model, means that manipulating these forwards

is possible to set the spot prices in a target zone for a long run.

According to conclusion of my empirical work, I postulate this way of intervention by the SNB.

The first step the SNB realize interventions in the forward market offering or demanding different quantities of forwards that move the prices in a target zone, in the same way that manipulate the Spot rate.

The SNB will specially offer or demand Quarterly, Semester and Annual forwards, with the objective to setup middle term range prices.

After this arrange of forward prices the SNB will manipulate the exchange market to

produce movements in the Spot rate that follow his price range zone. With these movements, the central bank reduce significantly the exchange risk (*Ceteris Paribus* the actual conditions of the Swiss Economy).

In a short and middle term, this risk reduction will affect the expectations of the participants of the market reducing the volatility of the exchange rate. This arrange of prices will give enough time to the central bank to make necessary monetary adjusts, in order to anticipate to the monetary shocks that are already caused (previously arranged in the forward market) but that only will be visible in the future by the market participants.

BIBLIOGRAPHY

- Ahtiala, P. (2009). When is money neutral under flexible exchange rates? *International Review of Economics & Finance*.
- Banks, F. (2001). *Global Finance and Financial Markets*. World Scientific Publishing .
- Bernd Kempaa, M. (1998). On the Viability of Exchange Rate Target Zones in a Mundell–Fleming Model with Stochastic Output Shocks. *Journal of Policy Modeling*.
- European-Central-Bank. (2014). European Central Bank. Retrieved from <http://www.ecb.europa.eu/stats/money/aggregates/aggr/html/hist.en.html>
- Federal Reserve, N. (2014). <http://www.ny.frb.org/aboutthefed/fedpoint/fed40.html>.
- Federal-Reserve. (2014). <http://www.federalreserve.gov/monetarypolicy/openmarket.htm>.
- Fernandez, S. F. (2014). *Universidad Autónoma de madrid*. Retrieved from <http://www.fuenterrebollo.com/Economicas/SERIES-TEMPORALES/modelo-arima.pdf>
- Friedman, M. (1953). *The Case for Flexible Exchange Rates (Essays)*. Chicago: Chicago pres.
- Geert Bekaert, R. H. (2012). *International Financial Management* . Pearson.
- Gert Bekaert, R. (2012). *International Financial Management*. Pearson.
- Guglielmo Maria Caporale, J. H. (2005). On the linkages between stock prices and exchange rates: Evidence from the banking crisis of 2007–2010. *International Review of Financial Analysis*.
- Gujarati, D. N. (2003). *econometrics, Basic*. McGraw Hill.

- IMF. (2014, 06 30). <http://www.imf.org/external/np/sta/cofer/eng/>.
- Inci, A. C. (2004). Exchange rates and interest rates: can term structure models explain currency movements? *Journal of Economic Dynamics and Control*.
- Inci, A. C. (2007). US–Swiss term structures and exchange rate dynamics. *Global Finance Journal*.
- Jerome L Steina, G. P. (1997). Recent developments in international finance: A guide to research. *Journal of Banking & Finance*.
- John Hunter, F. M. (2014). Money demand instability and real exchange rate persistence in the monetary model of USD–JPY exchange rate. *Economic Modelling*.
- Kim, T. (1993). *International Money and Banking*. London and New York: Routledge.
- Krugman, P. (2014). *Currency wars the impossible trinity*. Retrieved from The New York Times: http://krugman.blogs.nytimes.com/2011/05/09/currency-wars-and-the-impossible-trinity-wonkish/?_php=true&_type=blogs&_r=0&module=ArrowsNav&contentCollection=Opinion&action=keypress®ion=FixedLeft&pgtype=Blogs
- Levi, M. (2009). *International Finance*. London: Routledge.
- Levi, M. D. (2005). *International Finanace Contemporay Issues*. New York: Taylor Francis Group.
- Marc, Simpsona. (2005). The impact of macroeconomic surprises on spot and forward foreign exchange markets. *Journal of International Money and Finance*.
- Mendoza, B. (2006). *Macroeconomía*. Lima: Fondo Editorial Universidad Católica.
- Michael W. Kleina, J. C. (2008). The dynamics of exchange rate regimes: Fixes, floats, and flips. *Journal of International Economics*.
- Michael W. Kleina, J. S. (2006). Fixed exchange rates and trade. *Journal of International Economics*.
- Murshed, S. M. (1997). *Macroeconomics for open economies*. London: the dryden press.
- Oecd. (2014). *Oecd library*. Retrieved from Main Economic Indicators, Volume 2014: <http://www.oecd-ilibrary.org/docserver/download/3114051e.pdf?Expires=1400227986&id=id&acc>

- name=ocid76020525&checksum=579685519984B-319913043DF56B91CBE
- Paul Samuelson, W. N. (1989). *Economics*. McGraw-hill.
 - Richhild Moessnera, W. A. (2013). Journal of International Money and Finance. *Central bank swap line effectiveness during the euro area sovereign debt crisis* .
 - Rokicki, D. B. (2014). *Universytet Warszasky*. Retrieved from http://coin.wne.uw.edu.pl/brokicki/wsp_images/oem___lecture_10.pdf
 - Schweizerische National Bank. (2013). SNB. Retrieved from http://www.snb.ch/en/mmr/reference/quartbul_2013_4_komplett/source/quartbul_2013_4_komplett.en.pdf
 - SECO. (2014). *State Secretariat for Economic Affairs SECO*. Retrieved from <http://www.seco.admin.ch/?lang=en>
 - Shapiro, A. (2010). *Multinational Financial Management* . Wiley.
 - Sharan, V. (2003). *International Business Concepts, Environment and Strategy*. Pearson.
 - Sokas, J. L. (2002). *Áreas monetarias y convergencia Macroeconómica: Comunidad Andina*. Venezuela: Ucab.
 - Wang, P. (2009). *The Economics of foreign exchange and Global finance*. United Kindom: Springer.
 - Washington, U. (2014). *University of washington*. Retrieved from <http://faculty.washington.edu/ezivot/econ584/notes/varModels.pdf>

INSTRUCCIONES PARA LOS AUTORES

No.2

Los autores interesados en publicar sus artículos en la revista *Economicus Heterodoxus*, editada por la Universidad Piloto de Colombia, deben hacer seguimiento detallado de las siguientes instrucciones, por ello se recomienda leer detenidamente y en su totalidad el contenido de las mismas. Se relacionan las pautas relativas a: público al que se dirige la publicación, características de los artículos y condiciones de presentación de documentos a la revista, procesos editoriales que sufren los documentos postulados a la revista (recepción, verificación de cumplimiento de condiciones, evaluación por pares, ajustes al documento, aceptación de la publicación, publicación final, canales de comunicación de la revista con los autores, responsabilidad de la revista) y descripción del proceso de evaluación.

Público al que se dirige la revista *Economicus Heterodoxus*

La revista *Economicus Heterodoxus*, editada por la Universidad Piloto de Colombia, pretende contar con un espacio para publicar artículos de interés a la comunidad académica y científica en temas económicos y sociales tanto en el contexto nacional como internacional. El nombre propuesto *Economicus Heterodoxus* hace referencia a la polisemia de la economía y a las diversas corrientes que alimentan la ciencia económica y que en general son de carácter transdisciplinar, elemento diferenciador de esta publicación.

Procesos editoriales de los artículos presentados a la revista *Economicus Heterodoxus*

A continuación se describen las etapas editoriales que experimentan los artículos presentados a la revista *Economicus Heterodoxus*:

Procedimientos para la recepción de artículos y verificación

El (los) autor(es) envía(n) su expresión de interés de publicar en revista *Economicus Heterodoxus* al correo electrónico economicus-heterodoxus@unipiloto.edu.co, adjuntando el artículo, la carta de cesión de derechos (incluye la certificación de ser un trabajo original y de no estar en evaluación paralela en otra revista científica ni hacerlo en el futuro, además de incluir el compromiso de utilizar adecuadamente las formas de citación y referencia para reconocer la autoría de las diferentes fuentes utilizadas) y el formato de autores debidamente diligenciado. Posteriormente, el editor científico verificará el cumplimiento de las instrucciones aquí relacionadas, si existe incumplimiento, el editor científico comunicará la no aceptación del documento y expresará con claridad los motivos de exclusión. El autor podrá presentar nuevamente el documento y los formatos las veces que lo requiera hasta lograr la aceptación inicial.

Cuando se haya verificado el cumplimiento de las instrucciones, el editor científico comunicará al autor el paso del documento al Comité Editorial e ingresará los datos del artículo en la base de datos de la revista, especificando este estado. En caso de que el autor no reciba la comunicación, el correo debe ser enviado por el autor nuevamente hasta obtenerlo.

El Comité Editorial tendrá la función de seleccionar los artículos que se envían a revisión por pares. Los pares evaluadores serán escogidos de una base de datos administrada por el editor científico, o por referencia de los integrantes del Comité Editorial.

Evaluación por pares

Los artículos seleccionados por el Comité Editorial se presentarán a pares, dos por cada documento, y evaluarán las condiciones de calidad del artículo, específicamente: definición del tipo de artículo a juicio del par, valoración de la recopilación teórica, construcción del artículo, aporte al avance de la ciencia en el tema específico, aspectos formales de normas APA y construcción de textos en inglés. En todos los casos, el proceso de evaluación se sustenta en el anónimo de doble vía, los pares no conocerán a los autores ni las instituciones que representan, tampoco los autores a sus evaluadores.

Los conceptos finales que emitirán los evaluadores serán:

- ___ El artículo debe publicarse como ha sido enviado. El manuscrito puede mejorarse como se sugiere, pero no es necesario que se revise nuevamente.
- ___ El artículo puede publicarse solo si se atienden antes de su publicación todos los cambios (menores) que se indican o sugieren.
- ___ El artículo contiene material valioso y puede publicarse solamente si se atienden todos los cambios y sugerencias que se indican. Se requiere evaluar nuevamente la versión modificada del manuscrito.
- ___ El artículo no debe publicarse en la revista *Economicus Heterodoxus* por las razones que se indican en esta revisión.

Ajustes a documentos

De acuerdo con los conceptos emitidos por los pares evaluadores, el editor científico solicitará los ajustes y emitirá comunicación oficial sobre el resultado de la evaluación. En todas las circunstancias los autores conocerán las evaluaciones de sus obras.

Aceptación de la publicación del artículo

Superadas las etapas de evaluación y ajustes, y después de determinar la aprobación de la publicación, el editor científico, notificará la publicación del artículo e indicará la información bibliográfica del mismo.

Medios de comunicación con la revista

El único medio reconocido por la revista *Economicus Heterodoxus* es el correo electrónico, todas las comunicaciones oficiales se emitirán por este medio y será la única vía válida. En cualquier caso, el autor principal (primer autor) del artículo liderará la comunicación sobre el documento, sin embargo, los demás autores pueden solicitar comunicación directa con la revista *Economicus Heterodoxus*. Otras formas de comunicación, personal, telefónica, cartas deben ser corroboradas por el correo electrónico, solicitando acuse de recibo o la descripción de la conversación.

Responsabilidad de la revista

Las opiniones y los artículos de los textos que resulten publicados en la revista *Economicus Heterodoxus* son responsabilidad exclusiva de los autores y no son representativas, necesariamente, de la filosofía de la Universidad Piloto de Colombia, ni responden, de una manera forzosa, a la línea de la revista *Economicus Heterodoxus* o la opinión del Editor (a) de la misma.

Características y condiciones de presentación de artículos a la revista *Economicus Heterodoxus*

Junto con el texto del artículo, los autores deberán enviar al correo electrónico economicus-heterodoxus@unipiloto.edu.co la carta de cesión de derechos firmada y escaneada y el formato de autores debidamente diligenciado. Tanto la carta, como el formato de autores, deben ser solicitados al correo electrónico de la revista (economicus-heterodoxus@unipiloto.edu.co).

La revista *Economicus Heterodoxus* publica artículos científicos, por tanto recibe los siguientes tipos de artículos: artículo de investigación científica y tecnológica, artículo de reflexión y artículo de revisión (Colciencias, 2010). A continuación se especifican las características de cada uno:

- o Artículo de investigación: es un documento que presenta, de manera detallada, los resultados originales de proyectos terminados de investigación. La estructura generalmente utilizada contiene cuatro apartes importantes con plena coherencia y cohesión: introducción, metodología, resultados y conclusiones (Colciencias, 2010); además, estos artículos deben presentar de manera concisa la fundamentación teórica y las fuentes utilizadas deben ser preferiblemente documentos de reciente divulgación. Se espera el uso de mínimo 25 fuentes para la construcción del documento.
- o Artículo de reflexión: documento que presenta resultados de investigación terminada desde una perspectiva analítica, interpretativa o crítica del autor, sobre un tema específico, recurriendo a fuentes originales (Colciencias, 2010). El artículo de reflexión debe evidenciar un tratamiento adecuado de las fuentes de información, así como la discusión y el aporte del autor sobre la temática expuesta.
- o Artículo de revisión: documento resultado de una investigación terminada donde se analizan, sistematizan e integran los resultados de investigaciones publicadas o no publicadas, con el fin de dar cuenta de los avances y las tendencias. Se caracteriza por presentar una cuidadosa revisión bibliográfica de por lo menos 50 referencias (Colciencias, 2010). Este tipo de artículo hace énfasis específicamente en la recopilación y la presentación de múltiples fuentes de información, al respecto se recomienda a los autores preferir fuentes de información publicadas recientemente, así como preferir las fuentes que han surtido algún tipo de evaluación, entre ellas artículos científicos publicados en revistas arbitradas; se pueden incluir, además, libros, capítulos de libro y memorias de eventos internacionales.

Condiciones de forma de los artículos

Con respecto a la presentación de forma de los artículos, los documentos deben cumplir estrictamente las siguientes condiciones (se presenta a manera de lista de chequeo, para que el (los) autor(es) verifiquen el cumplimiento de todas las indicaciones):

Redacción del título del artículo en español e inglés

Entregar en pie de página una breve reseña del (los) autor(es), que incluya: nombre(s) completo(s), correo electrónico, formación académica (títulos de pregrado y títulos de posgrado sin incluir las instituciones que otorgan el título académico, si el título obtenido se encuentra en español utilizar el prefijo Máster o Doctor según corresponda), afiliación institucional del autor, dirección postal del autor, ciudad y país del autor (o cada uno de los autores).

Presentar en nota de pie una breve descripción del proyecto de investigación que origina el artículo, mínimo debe contener: título del proyecto, entidad que financia y breve descripción del objetivo del proyecto.

Presentar en nota de pie la clasificación del artículo según el presente documento:

Artículo de investigación

Es un documento que presenta, de manera detallada, los resultados originales de proyectos terminados de investigación. La estructura generalmente utilizada contiene cuatro apartes importantes: introducción, metodología, resultados y conclusiones (Colciencias, 2010). Estos artículos se deben caracterizar por presentar de manera concisa la fundamentación teórica. Las fuentes utilizadas deben ser preferiblemente documentos de reciente divulgación y debe presentar claramente la articulación entre sustento teórico, metodología, resultados y conclusiones.

Artículo de reflexión

Documento que presenta resultados de investigación terminada desde una perspectiva analítica, interpretativa o crítica del autor, sobre un tema específico, recurriendo a fuentes originales (Colciencias, 2010). El artículo de reflexión debe evidenciar un tratamiento adecuado de las fuentes de información, así como la discusión y aporte del autor sobre la temática expuesta.

Artículo de revisión

Documento resultado de una investigación terminada donde se analizan, sistematizan e integran los resultados de investigaciones publicadas o no publicadas, sobre un campo en ciencia o tecnología, con el fin de dar cuenta de los avances y las tendencias de desarrollo. Se caracteriza por presentar una cuidadosa revisión bibliográfica de por lo menos 50 referencias (Colciencias, 2010). Este tipo de artículo hace énfasis específicamente en la recopilación y la presentación de múltiples fuentes de información, al respecto se recomienda a los autores preferir fuentes de información publicadas recientemente, así como preferir las fuentes que han surtido algún tipo de evaluación, entre ellas artículos científicos publicados en revistas arbitradas.

Redactar el resumen analítico del artículo, consiste en hacer la presentación de los apartados del artículo y una breve descripción de ellos, sin exceder las 300 palabras.

Abstract, es la traducción al inglés del resumen analítico.

Palabras clave: las palabras clave son palabras o términos descriptores del documento, son importantes porque con estos se realizan las búsquedas en bases de datos, preferiblemente deben estar incluidas en el título del artículo. Mínimo tres, máximo cinco términos.

Key Words, traducción al inglés de las palabras clave.

Presentar los siguientes títulos en el artículo: introducción, los relacionados con el desarrollo de la temática, conclusiones y referencias. En el caso de los artículos de investigación científica y tecnológica, se recomienda mantener el esquema de introducción, metodología, resultados, conclusiones y referencias.

Utilizar únicamente la norma APA para la presentación de citas y referencias, no se acepta en ningún caso la combinación de esta norma con otras formas de referencia y citación. Para guía del autor, puede consultar en Web el vínculo: <http://flash1r.apa.org/apastyle/basics/index.htm>

Extensión del artículo: mínimo 10 páginas, máximo 20 páginas.

Emplear tipo de fuente Times New Roman, tamaño 12, con interlineado a espacio y medio.

El artículo debe estar redactado totalmente en tercera persona del singular, con adecuada puntuación.

Todos los párrafos del artículo deben estar justificados a las márgenes derecha e izquierda

Utilizar máximo tres niveles de títulos, como se muestra a continuación: [1] corresponde al 1er nivel que es el título del artículo, [2] y [3] al segundo y tercer nivel, respectivamente, así:

Mayúscula y minúscula centrado [1]

Mayúscula y minúscula en cursiva alineado a la izquierda [2]

Con sangría, minúscula, en cursivas, alineado a la izquierda y finaliza en punto. [3]

Las tablas están presentadas adecuadamente (descripción a continuación).

Tener título y número en la parte de arriba de la tabla y seguir el siguiente formato,

Tabla 1

Título de la tabla

No se deben presentar las líneas verticales, deben estar descritas al interior del artículo y nombrando el número de la misma, deben estar elaboradas en la herramienta tabla del procesador de texto. Se debe especificar la fuente de donde se obtiene la tabla, si es construcción de los autores, se debe indicar así: Fuente: Autores, o Fuente: Adaptado de ..., o Fuente: construido a partir de ...

Las figuras y gráficas, deberán presentarse adecuadamente (descripción a continuación). Estar numeradas y tener título, esta información debe ir debajo de cada una de ellas.

Elaborar las ecuaciones en la herramienta de edición de ecuación del procesador de texto, estar numeradas y contener una descripción de sus componentes, así:

Ecuación 1

Donde x, equivale a....

No utilizar notas de pie de página (salvo casos excepcionales de aclaración de texto).

Proceso de evaluación de los artículos en la revista Economicus Heterodoxus

Todos los artículos que se presentan a la revista *Economicus Heterodoxus* serán evaluados por medio de un formato que recopila información sobre los siguientes aspectos: identificación del tipo de artículo de acuerdo con los criterios de los evaluadores; claridad y pertinencia de los elementos de los artículos, así como los elementos metodológicos que soportan el escrito; vigencia y aporte del artículo a la temática. Los evaluadores tienen la oportunidad de emitir comentarios y observaciones tanto para la revista como para los autores.

Referencias

Colciencias. (2010). Documento guía. Servicio Permanente de Indexación de revistas de Ciencia, Tecnología e Innovación Colombianas. Base Bibliográfica Nacional BBN. Índice Bibliográfico Nacional Publindex IBN. Recuperado de <http://201.234.78.173:8084/publindex/docs/informacionCompleta.pdf>



**Universidad
Piloto de Colombia**
UN ESPACIO PARA LA EVOLUCIÓN