

Econ - 3350 - American Economic Growth

3e. UH Core - Revising Existing Course to add to Core or Revise Existing Core Course and remain in Core (UGRD only)

1. Course Ownership/Implementation/Justification

Department*	Economics
Required Approval Steps*	<input checked="" type="checkbox"/> Undergraduate Studies Department Committee Review <input checked="" type="checkbox"/> Undergraduate Studies Department Chair/Program Director <input checked="" type="checkbox"/> Undergraduate Studies College Curriculum Committee
Will the course be cross-listed with another area?*	<input type="radio"/> Yes <input checked="" type="radio"/> No
If yes, has an agreement with department(s) been reached?	<input type="radio"/> Yes <input type="radio"/> No
Department(s) and Course(s) that will be cross-listed with this course	
Catalog year of implementation*	<input checked="" type="radio"/> 2016 - 2017 <input type="radio"/> 2017 - 2018
Term(s) Course will be TYPICALLY Offered:*	<input checked="" type="checkbox"/> Fall (including all sessions within term) <input type="checkbox"/> Spring (including Winter Mini all sessions within term) <input type="checkbox"/> Summer (including Summer Mini and all sessions within term) <input type="checkbox"/> Contact Your Academic Advisor
Justification(s) for Adding/Revising Course for Core*	1. REVISE EXISTING non-CORE COURSE <and> ADD TO CORE 1b. Change course description/content 1h. Change course prerequisite

State the rationale for creating this new Core course or revising the existing Core course:*

We are planning to withdraw Econ 3334 from the Component Area Option (b): Writing in the Disciplines. This is a technical course that requires students to understand economic models, graphs, etc. and the writing requirement interferes with the instructors' ability to effectively teach it. Due to the fact that American Economic Growth (Econ 3350) is writing intensive, we will add it to the "Writing in the Disciplines" core.

Justification - if "other" selected above:

2. Course Catalog Information

Instructional Area/ Course Prefix* Econ

Course Number* 3350

Long Course Title* American Economic Growth

Short Course Title (30 character limit)* American Economic Growth

Instruction Type* Lecture ONLY

Lecture* 3

Lab* 0

Course Credit Level* Junior

Grade Option* Letter (A, B, C.....)

Can this course be repeated for credit?* Yes No

If Yes, how often and/or under what conditions may the course be repeated?

Maximum number of credit hours required of this course in degree plan* 3.0

Number of course completions (attempts) allowed* 3

Are multiple enrollments allowed for course within a session or term?* Yes No

CIP Code* 45.0602.00 01

Requisite Checks in PeopleSoft (functionality within PeopleSoft)* Need to adjust requisite checks already in place - Begin enforcement Fall Need to adjust requisite checks already in place - Begin enforcement Spring Need to create requisite checks for course - Begin enforcement Fall Need to create requisite checks for course - Begin enforcement Spring No adjustment required - requisites not being changed No requisite check desired for course at this time

Prerequisite(s):* Econ 2304 and Econ 2305

Corequisite(s)

Course Description*

Applications of economic analysis to American economic history and how that history has shaped modern economic institutions, including the experience of the Colonies, the American Revolution, Industrialization, the Civil War and the Great Depression.

Course Notes**3. Authorized Degree Program(s)/Impact Study**

Is this a required course for any program (degree, certificate, or minor)?*

Yes - enter additional information in field below

No

If yes, for which program(s)?

Does this change cause a change in any program?* Yes - attach copy of program plan No

If yes, to which program(s)?

Does this change force changes in prerequisites for other courses?* Yes - enter additional information in field below No

If yes, which course(s) and is a proposal being submitted to reflect the change?

Impact Report*

Impact Report for Econ 3350

Sources: Undergraduate Catalog 2015 - 2016

Programs

4. Core Curriculum Information

Learning Outcomes*

Applications of economic analysis to American economic history and how that history has shaped modern economic institutions, including the experience of the Colonies, the American Revolution, Industrialization, the Civil War and the Great Depression.

By the end of this course it is expected that the student will be able to:

1. understand both the economics and the history of the development of the United States
2. understand various theories about the business cycle and imperfect competition
3. understand the evolution of legislative events and legal precedents in US law

Foundational Component Area for which the course is being proposed (select one)*

Social & Behavioral Sciences

Component Area Option (optional)

Component Area Option (b): Writing in the Disciplines

UH Core: Single or Double Category Listing

- List course in BOTH the Foundational Component Area and the Component Area Option categories
- List course in ONLY the Component Area Option category

Core Objectives addressed by the course*

Communication Skills

Critical Thinking

Empirical & Quantitative Skills

Social Responsibility

**Critical Thinking,
if applicable**

Early in the semester, after understanding some fundamentals of the subject matter and a perusal of the future subject matter, students will develop a term paper topic of their interest related to the course subject matter and perform a research survey of available literature. They are asked to submit a 1 page proposal of this topic, which is returned with comments and approval/disapproval. Over the remainder of the semester, students will continue to deepen their research and compose their term papers. The syllabus lists as a course requirement a 10 page term paper (with specific formatting instructions). For this assignment, students must consolidate and summarize the research literature to support their term paper topic. Students will apply and interleave their knowledge of economic concepts and theories from their assigned media and/or lectures, and incorporate their personal, educated evaluation and/or reaction to research literature in the the construction of their topic.

**Communication
Skills, if
applicable**

In the same ten page page paper as above, students will demonstrate their ability to communicate effectively.

**Empirical &
Quantitative
Skills, if
applicable**

In the same ten page page paper as above, students will demonstrate their empirical and quantitative skills.

**Teamwork, if
applicable**

**Social
Responsibility, if
applicable**

In the same ten page paper as above, students will demonstrate social responsibility.

**Personal
Responsibility, if
applicable**

**Will the syllabus
vary across
multiple section
of the course?***

- Yes
- No

**If yes, list the
assignments that
will be constant
across sections**

5. Supporting Documentation

- Type of Attachments***
- Course Syllabus
 - Degree Plan
 - Memo
 - Other Document(s)

"Other" documents: Example of completed assignment.

6. Additional Information Regarding This Proposal

Contact person for questions about proposal:* Prodan-Boul, Ruxandra - rprodan@uh.edu

Comments:

TO: CLASS UNDERGRADUATE STUDIES COMMITTEE
FROM: RUXANDRA BOUL; UNDERGRADUATE DIRECTOR/ECONOMICS
SUBJECT: CATALOG CHANGES

The Department of Economics would like to make some changes to the undergraduate catalog:

1. We would like to make permanent the following successfully taught special topic courses:

Econ 3342 Global Issues in Economic Development

Pre-requisites: Econ 2301 or Econ 2304

Course Objective: The objective of this course is to provide reading material and lectures which facilitate a better understanding of the world, its politics, its people, the problems facing the global environment and the changing global economy in which we live. We will study populations that have experienced a dramatic transformation and improvement in the conditions of their life and those that have not. Credit may not be earned in both Econ 4389 and Econ 3342.

Econ 3348 Food, Population, Agriculture and the Environment

Pre-requisites: Econ 2301 or Econ 2304

Course Objective: The objective of this course is to provide reading material and lectures which facilitate a better understanding of the world, its politics, its agriculture and food production, the dynamics of population, the problems facing the global environment and the changing global economy in which we live. Central to the course is both the sustainability and the economics of global food production systems and their ability to end hunger and malnutrition and to feed a growing world population. Credit may not be earned in both Econ 4389 and Econ 3348.

Econ 4395 Special Topics in Applied Econometrics

Pre-requisites: Econ 3370 (previously Econ 4365)

Catalog Description: Econ 4395 is a continuation of Econ 3370 (previously Econ 4365) and introduces students to several extensions of multiple regression methods for analyzing data in economics and related disciplines. Topics might include regressions with panel data, instrumental variables regression, analysis of randomized experiments, regressions with time series data, forecasting, probability models, survival analysis, etc.

Econ 4374 Behavioral Economics

Pre-requisites: Econ 3332, Intermediate Microeconomics

Description: The course explores various ways in which the predictions of classical economic theory fail in the real world and attempts to modify the theories to take into consideration these deviations and better explain and predict human behavior. This course will introduce students to the basic findings of this field and give them the tools to formulate new theories, test predictions, and apply the insights from behavioral economics to the real world.

2. We are planning to make the following changes to our Intermediate courses (Econ 3334 and Econ 3332) and two courses to the "Writing in the Disciplines" core.

Given that we have made our introductory courses (Econ 2304 or Econ 2305) pre-requisites for the intermediate courses, our students will be able to fulfill their 3 hours of "Social and Behavioral Science" core requirement. This makes the intermediate courses redundant in the core. As a result, we are withdrawing Econ 3332 from the "Social and Behavioral Science" core. We are also planning to withdraw Econ 3334 from the Component Area Option (b): Writing in the Disciplines. This is a technical course that requires students to understand economic models, graphs, etc. and the writing requirement interferes with the instructors' ability to effectively teach it. We will add two of our courses that are writing intensive, American Economic Growth (Econ 3350) and History of Economic Thought (Econ 3344) to the "Writing in the Disciplines" core.

Summary of Changes:

ECON 3332 - Intermediate Microeconomic Theory

- Erase from the "Social and Behavioral Science" core.
- Pre-requisite change: Econ 2304.

ECON 3334 - Intermediate Microeconomic Theory

- Erase from the "Writing in the Disciplines" core.
- Pre-requisite change: Econ 2305.

Econ 3350 American Economic Growth (Econ 3350)

- Add to the "Writing in the Disciplines" core
- Pre-requisites: Econ 2304 and Econ 2305

Econ 3344 History of Economic Thought (Econ 3344)

- Add to the "Writing in the Disciplines" core.
- Pre-requisites: Econ 3332 and Econ 3334

University of Houston Department of Economics
SYLLABUS Fall 2015 (Tentative)
AMERICAN ECONOMIC GROWTH
Econ 3350-Sec 01 (18523) TT 11:30-1 AH2 (Agnes Arnold Hall)

INSTRUCTOR: Dr Ross vanWassenhove
OFC LOC: 220 McElhinney Hall
INSTR WEB PAGE: <http://www.class.uh.edu/Faculty/vanwassenhove/teaching/index.html>
CLASS WEB PAGES: <http://elearning.uh.edu>
OFC HRS: 1) TT 10-11 2) before/after class 3) appointment
EMAIL: rsvanwassenhove@uh.edu
FINAL EXAM **Thursday December 10, 11-2, AH2, ID REQUIRED**

PREREQUISITES: Econ 2301 or 2304 required

BOOKS/SOFTWARE

American Economic History; 8th ed., Hughes, Jonathan, and Cain, Louis P; hardcopy (buy or rent) or online (www.coursesmart.com) **REQUIRED**

Bringing book to class and reading ahead for discussions usually results in higher grade.

Final grades are categorized by deviation from the class average. Usually, at an undergraduate course level, near average is typically a C+/B-. Below 30% course average is usually a failing F grade.

NO LATE WORK ACCEPTED. NO EXTRA CREDIT. NO MAKE-UPS

(Exception: exam may be made up or waived at the Instructor's discretion with medical emergency form signed by the attending physician – may be used once only)

GRADING:

ITEM	Portion	Method
Exam 1 Chapters 1-12 Part 1: Terms & Concepts Part 2: Topical Essay	25%	M/C, fill-in, short answer, essay
Exam 2 Chapters 13-24 Part 1: Terms & Concepts Part 2: Topical Essay	25%	M/C, fill-in, short answer, essay
Term Paper: Event or legislation – see BB for specs	25%	Turn-It-In via Blackboard
Final Exam – Comprehensive Part 1: Terms & Concepts Part 2: Topical Essay	25%	M/C, fill-in, short answer, essay

NOTES: Grades are not negotiable. Discussion over grades will be allowed only in the event of erroneous posting. Observance of due dates/times for all submitted material is the responsibility of the student. See FAQs on Instructor web site (under construction).

COURSE TENTATIVE SCHEDULE

Date	Topic – Technical Focus
Tu 08/25	Introduction; Course Structure; Growth Theory and Measurement
Th 08/27	Chapter 1 Overseas Empire Chapter 2 Colonial Development
Tu 09/01	Chapter 3 America on the Eve of Revolution
Th 09/03	Chapter 4 Gaining Independence
Tu 09/08	Chapter 5 Westward Expansion
Th 09/10	Chapter 6 Population and Labor Force
Tu 09/15	Chapter 7 Law and the Rise of Classical American Capitalism
Th 09/17	Chapter 8 Transportation, Internal Improvements, and Urbanization
Tu 09/22	Chapter 9 Agricultural Expansion: The Conflict of Two Systems on the Land Chapter 10 The Debate over Slavery Monday 1 PAGE PAPER PROPOSAL DUE – must be submitted on paper in class
Th 09/24	Chapter 11 The Direction of Change in Manufacturing Chapter 12 The Financial System and the International Economy
Tu 09/29	Exam 1 – 25% of Grade – 242 CBB – Blackboard
Th 10/01	Chapter 13 Economic Effects of the Civil War
Tu 10/06	Chapter 14 Railroads and Economic Development
Th 10/08	Chapter 15 Post-Civil War Agriculture Chapter 16 Population Growth and the Atlantic Migration
Tu 10/13	Chapter 17 Industrialization, Entrepreneurship, and Urban Growth
Th 10/15	Chapter 18 Big Business and Government Intervention
Tu 10/20	Chapter 19 Financial Developments
Th 10/22	Chapter 20 The Giant Economy and Its International Relations
Tu 10/27	Chapter 21 Labor and the Law
Th 10/29	Chapter 22 The Command Economy Emerges: World War I
Tu 11/03	Chapter 23 “Normalcy”
Th 11/05	Chapter 24 The Great Depression
Tu 11/10	Exam 2 – 25% of Grade – 242 CBB – Blackboard
Th 11/12	Chapter 25 The New Deal
Tu 11/17	Chapter 26 The “Prosperity” of Wartime
Th 11/19	Chapter 27 Before the New Frontier: The Postwar Economy Chapter 28 Population Health and Labor
Tu 11/24	Chapter 29 Postwar Industry and Agriculture
Th 11/26	US Holiday – no classes
Tu 12/01	Chapter 30 To The New Millennium and Beyond
Th 12/03	Chapter 31 Does Our Past Have a Future? PAPER DUE – TurnItIn via Blackboard; Admin Items
Th 12/10	FINAL EXAM 11-2 – 25% of Grade – in class on paper scansheets provided

The above schedule and procedures in this course are subject to change in the event of circumstances beyond the instructor's control.

EMAIL RESPONSE POLICY:

The following emails will likely not receive a response:

- Unless you give me permission, anything about grades on exams
- Why you missed class or an exam
- Where or when any exam is
- Any item clearly listed in the syllabus
- Assigned final grades, unless you can demonstrate that I made a mistake
- Email to any other email address than listed above

ACADEMIC DISHONESTY: Honesty in completing assignments is essential to the mission of the university and to the development of the personal integrity of the student. Cheating, plagiarism, or other kinds of academic dishonesty will not be tolerated and will result in appropriate sanctions that may include failing an assignment, failing the class or being suspended or expelled. Examples of academic dishonesty can be found in the UH Student Handbook.

UH STUDENT DISABILITY POLICY: UH seeks to provide reasonable accommodations for all students with disabilities. UH supports and adheres to all applicable laws with respect to providing reasonable accommodations to allow an equal educational opportunity to all students. The student is responsible to register with Disability Support Services and advise your instructor of any disabilities so that appropriate support and accommodations can be arranged.

NO CHILDREN OR PETS ARE ALLOWED IN CLASS
NO RECORDING of ANY PART of ANY CLASS IS ALLOWED

Arthur Simondet (1180226)

vanWassenhove T/Th 2:30-4:00

Term Paper

The series of financial developments from 1863 to 1914 marked some of the most fundamental and critical introductions, innovations, and total modifications of both operative and regulatory environments in finance and the capital markets. These undertakings contributed to either expanding the United States' economy or causing dilemmas to the banking industry and the people. From the more broad concepts such as the introduction of financial intermediation and the Banking Act of 1863 to the more specific developments of derivative securities in the form of futures contracts all contributed to these effects, in either direction. Other components such as the ongoing expansion of investment banking and the capital markets as well as the role, or lack thereof, of precious metals, and ultimately, what the People's Party was pushing for at any particular time were also equally contributing workings to the system, how it developed over this time, and why. Contrary to popular belief, these strictly independent events are actually all interlinked and are simple reactions to actions which can be closely compared to a push and pull type of effect.

"Until the 1863 National Banking Act, banking in the United States was a mixture of (1) licensing by special state charters, (2) banking done by nonchartered private bankers, or under general state rules, and (3) free banking, following New York State's

system” (Rockoff). At this particular time, there were two distinct banking systems which consisted of both the national banks under their federal charters and the state-level banks operating under the state banking system. There was total confusion in the banking industry at this time resulting from this two-system operation. Both systems had their own mechanics and issued their own securities, one set being national notes originating from the federal government and the other being proprietary bank notes from each independent state bank. It is relatively clear that the turn of the 1860s was going to introduce new operative and regulatory procedures, and it did. The decade started with well over one thousand state-level banks that were issuing their own proprietary bank notes to fund diverse activities. “There may have been [ten thousand] different kinds of bank notes in circulation” (Hughes 386) at this time. This entire mechanism is operating fully independently of the note-issuing federal government which was causing a high degree of capital raising burdens for the treasury who simply could not remain competitive with the state banks’ offerings. The federal government was essentially at a stalemate unless (or more accurately, until) it could develop a solution to drastically increase the sale of its notes in order to fund its activities as well as what would be a war further in the future.

It did not take long for the eventual proposition of the National Bank Act of 1863 to be introduced. Although not exact, the system was derived from a very comparable, and at the time, currently established structure developed and utilized by the Bank of

England. The objective, while surely not publicly disclosed at the time, was clearly to attempt to render state-level bank note securities useless through direct regulatory action. This would be accomplished by “[having] the state banks rechartered by the federal government” (Hughes 386). The National Bank Act of 1863 was also a prime example of how timing had a significant impact on the changes made in finance and banking throughout this period. The federal government was going to meet very little resistance in congress to get the act in and approved without any issues. During this particular time, the south, characterized by a large number of state-level banks, was heavily lacking, if any at all, representation in congress. As was expected, the act passed in 1863 without any difficulty but produced very little change in its first year. There are multiple theories behind this although it is relatively well-assumed that this was due to poor planning and too quick of action taking the act straight to a vote before the opportunity for it to pass closed itself. There were cases of redundancy and lacking framework which both resulted in a much-needed set of revisions introduced merely a year later in 1864. The revisions of 1864 were primarily focused on adding the framework component to the act, or in other words, add a body to what was essentially a skeleton at the time. Two fundamental changes included the “[establishment] of a new office, the comptroller of the currency, [and a series of adaptable] capital requirements and controls” (Hughes 386). The office was going to contribute to notes delegation while the adaptable capital requirements aided in developing structure in the regulation and

add a level of reliability which boosted confidence when compared to notes issued in the state-level system.

Most notably, however, were the many advantages and incentives packaged into the new national-level offering of note securities. “The national bank notes were to be legal tender for all except customs payments” (Hughes 386) which was a critical point adding an immense level of flexibility and opportunity to investing in these notes. In addition, the notes carried a very minor tax rate which was merely a fraction compared to the two percent tax rate imposed on state bank notes which acted as yet another contributing incentive. 1865 brought forth an even higher tax rate of ten percent on state bank notes which pushed the already soaring number of nationalized membership even higher while simultaneously rendering the state-level revenue model unprofitable. At this point in time, it would appear that the objectives planned and executed in the National Bank Act of 1863 were coming into full swing; unfortunately, this couldn’t be further from the reality as the gap between the two systems had now been more clearly defined than ever before. With regulation always comes innovation and changes in business practices to overcome the burden. Although remaining complex, this reality couldn’t be truer than the two-sided banking system in the mid to late nineteenth century. Although the state-level system was heavily burdened by the changes made by the National Bank Act of 1863, those same banks rather rapidly found an alternative method of generating revenue and funding activities.

In 1870, less than a decade after the original National Bank Act of 1863 passed, state-level banks were already making a comeback. Although strangled by the ten percent tax rate imposed on their proprietary notes, the state-level banks had developed a new strategy to generate revenue while continuing to fund activities. Merely three decades later, “the state banking system held considerably more in total assets than did the national” (Hughes 387). This is on top of the fact that there was a greater number of state banks, although smaller in physical size, totaling at approximately thirteen thousand banks, or nearly a nine hundred percent increase from the number around the time of the implementation of the National Bank Act of 1863. Termed deposits and checks, but in the particular case of the revenue generating component, demand deposits, enabled state-level banks to effectively act as an intermediary between individuals and institutions with excess capital and individuals and institutions in need of capital. The system could be as equally versatile as the national notes acting as legal tender in that the demand deposits could serve as a medium of exchange to replace a barter type of transaction or the use of coins as long as the people were willing to accept it as a valid form a payment. This isn't a very big hurdle for the innovative system simply because the system itself eliminates an enormous redundancy aspect to the current methods used in transactions. The people would voluntarily transition into this system for the reason that not only would it start to become more popular from the snowball effect, but it is simply an easy lifestyle transition. The process itself eliminated

an enormous amount of complexity seen in payment methods prior to this innovation. Ultimately, “state banks no longer needed to print their own promissory notes to create bank credit” (Hughes 388) which marked another fundamental transition in the system. Only shortly thereafter were state banks able to nearly completely recover, in terms of capital, the losses or lack of revenue from the heavily damaged promissory notes business.

Come the 1890s, after two decades of very promising results out of the state-level demand deposit innovation, the national banks transitioned into and adopted the identical system, a logical move considering the results of their system at the time. The yields on their bonds were at rock bottom and therefore there was very little demand to invest. By this time, state-level notes were nothing more than a piece of history and the demand for the national note system was going to rapidly vanish as the transition to demand deposits came into full swing. This would remain the case until the turn of the twentieth century which brought a massive upswing in interest rates ultimately leading to significant demand in bonds. It remains important to note that going into the twentieth century monetary policy was under constant revision as the federal government made rather large bets at unhedged ideas in a desperate attempt to solve a variety of problems with one solution. Some of these activities included anything from adjusting capital requirements to changing the values in deposit requirements in relation to bonds. This was all relatively unsuccessful as pointed out by the relationships between notes

and precious metal commodity supply at any particular given time, but especially when viewed linearly by year. The disparity between the assets completely flipped during this time where “[five dollars] of pure paper afloat for every [one dollar] of some [metal in the 1870s was the standard, by 1900] there were about [forty cents] in paper for every [one dollar in metal]” (Hughes 389).

Surely one of the most interesting and both fundamental yet very technical inventions, and future innovations, was the rise of the investment bank, the to-be intermediary that would shape the future of raising capital, creating and packaging securities, and pushing the United States into a level of never before seen rapid growth. Expanding on the opinion that all activities from this time, though independent, are very much interlinked together, the investment bank truly came about as a result of specific components of the vast concept of financial intermediation. In fact, financial intermediation itself essentially opened up the opportunities to conduct the multitude of business areas most investment banks specialize in. The right people only had one question to research prior to opening up for business, and that was could they attract the right institutional clients with excess capital while simultaneously locate individuals and firms that are in need of capital, the bread and butter of the investment banking business.

A relevant and important comparison to note in order to better understand how investment banking in the United States truly operated is to compare to the already

established and relatively successful, in its own way, British banking industry. “Lance Davis noticed an interesting difference between [the two] with respect to the linkage between industrial and financial development” (Davis). Davis had the advantage of experiencing both industries in both countries and therefore was able to make detailed observations identifying the striking differences between the two systems. In America, investment banking was truly inspired from the brokerage model; the focus was acting as a middle man between two parties for a variety of different services but primarily to flow capital from savers to spenders through securities. In order to accomplish this, American investment banks focused on size above all else. As the entities grew, the exclusivity of engaging in business with them increased. A small firm’s ability to go to an investment bank in an attempt to raise capital or be on the receiving end of a structured security was rare. British investment banking was truly the opposite in that, for starters, investment banks had a rather large amount of small-sized branches located in many cities versus exclusively New York’s equivalent, London. This fact trickles down the industry chain and what Davis saw was that any size, small, medium, or large, “British industrialist could raise the capital for expansion without surrendering their individual firm to amalgamation” (Hughes 393). In turn, there are two clearly established trends: only large American industrialists requiring large sums of capital had true access to the services of recognized investment banks while British industrialists of all sizes could effectively find sources of capital adapted in size to their firms. Britain was primarily

represented by a large number of smaller firms while America was represented by a smaller number of very large firms.

The capital markets were derived from relatively simple need: collect excess capital in order to be redeployed in areas demanding capital all in exchange for one or a combination of returns including forms of equity ownership, interest, etc. Initially the capital markets were defined in segments based on the time opportunity of an investment. Investment banks had a tendency to focus their time in shorter term opportunities while the insurance front developed longer term fixed income type securities. From the start of the twentieth century to a mere two decades later, assets and specific securities were already beginning to become more complicated and more advanced. At the start of “1914, national banks could lend against mortgages” (Hughes 394), essentially a derivative of the demand deposits system. This practice of essentially taking existing forms of securities and restructuring them into new asset classes was becoming more and more common.

Probably one of the most critical “work horse” securities to be developed in the late nineteenth and innovated in the twentieth century was the derivative product, specifically in the form of the futures contract. The futures contract originates from agriculture, specifically wheat farming. Farmers were looking for a form of insurance on the future value of their farm’s yearly return. This insurance didn’t exactly exist, and the futures contract was born, a security that locked in the price of a commodity at a future

date. "The futures contract evolved as farmers and dealers began to commit to future exchanges of grain for cash" (TradingCharts.com) on an epic scale. The futures contract, unlike a multitude of other assets packaged and traded at the time, was one of the few products whose true value could be quantified. The effect the futures contract had on the agricultural industry's ability to expand, innovate, and produce more couldn't be more pronounced than throughout the twentieth century. The impact of the futures contract was long term and as the futures market expanded to cover other assets including other commodities and beyond the effect on American economic growth was immense. Although the leverage in derivatives contained a significantly higher degree of risk, it was also the main reason behind the parabolic growth rate.

Finance, banking, and the capital markets have historically been one of the most complex industries by a significant margin. Both the simple and technical inventions and innovations to the business have been difficult to understand and traditionally quite redundant. The key, however, is to attempt to understand these truly independent events from a linked web perspective because the reality is that all of the financial developments of the nineteenth and twentieth centuries are linked together through reactions to actions, innovations to side-step regulation, and the constant push for expansion and growth. All aspects from the development of the demand deposits system as the south's answer to steer clear of the National Bank Act of 1863 to the creation of the investment bank, the backbone of the large enterprise merger movement

and financial intermediary, creator of advanced securities for the capital markets all contributed to the absolute and parabolic growth rate the United States experienced throughout those decades. The financial developments of this time, together as a single linked mechanism, paved the way of the United States economy and international marketplace for decades to come.

Works Cited

Rockoff, H. (1975). Varieties of Banking and Regional Economic Development in the United States, 1840-1860. *The Journal of Economic History*, 35(1), 160-181. Retrieved November 29, 2014, from JSTOR.

Hughes, J., & Cain, L. (2011). Financial Developments 1863-1914. In *American Economic Growth* (8th ed., pp. 385-405). Boston, MA: Pearson Education.

Davis, L. (1964). Capital Immobilities and Finance Capitalism : A study of economic evolution in the United States 1820-1920. 1, 88-105. Retrieved December 1, 2014, from ECONIS.

Futures Markets - Part 1: A Brief History. (n.d.). Retrieved December 2, 2014, from <http://futures.tradingcharts.com/tafm/tafm1.html>