The Newsletter of

The Cliometric Society October 1988 Vol. 4 No. 1

The Second **World Congress** of Cliometrics

June 24 - 27 Santander, Spain

Santander in June -**Make Plans Now to Attend**

The exact site of the Second World Congress is the Universidad de Cantabria in Santander, on the northern coast of Spain. The dates are Saturday, June 24 through Tuesday, June 27, 1989. We are pleased to announce that we have just received the great news that our Spanish hosts, Leandro Prados and Pablo Martin-Acena, now have generous commitments to cover lodging and meals for all participants. For those contemplating bringing their spouses to the Congress, our Spanish hosts are also working on making this as convenient as possible.

To Be on The Program:

To guarantee consideration, those who wish to be on the program should submit three copies of a four or five page summary of their work to the Society office by 1 December. We will allow overseas applicants a bit more time, @ 10 days. The complete paper can be submitted along with the summary, but an abstract alone will not be acceptable. Please tell your colleagues and students who may not get the Newsletter about this deadline. While we prefer submissions by mail, if you are running late, we will accept them via BITNET or FAX.*

George Grantham has agreed to be the chair of the Program Committee that will select the papers. He will review all submissions and in consultation with the Secretary assign the papers to others for further input. The Society Trustees, former trustees, and the Steering Committee may all be asked for input on the program. Those selected will be notified by 30 January and it will be necessary to have the completed papers in the Society office by 30 March.

To Attend:

Those who wish to attend without presenting a paper should use the procedures that will be outlined in the Clio membership mailing (first class) which will go out in early December. You will need to make your request by 1 February.

As announced, all members of the Society will be welcome to attend. Since there will be expenses both in Spain and from this office in reserving hotel rooms and meals, for reproducing the papers and mailing them to each participant, it will be important that we get a clear and definite commitment from those who will attend. Therefore, we will appreciate a prompt response to the December mailing.

Travel: for US participants

For now, we encourage our United States members to seek funding from whatever sources you have available. We have applied to NSF for funds to assist about 25 scholars from the US who cannot find other monies. Graduate students and recently appointed faculty who would not otherwise be able to attend will have priority. We will not know if this request will be funded until December or January. We are seeking funding from other sources as well.

If we do receive funding for travel there will be a special mailing to US Clio members explaining the procedures for applying, with a deadline of 1 February. Applicants will be encouraged to send their vitas and, if appropriate, to have a senior colleague or dissertation adviser nominate them. Please DO NOT APPLY until after you receive the announcement.

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Beach on the north coast of Spain

There will be a sub-committee of the Congress Steering Committee that will decide who receives funding. While priority will be given to those on the program, it will not be given to those who submit proposals which are subsequently not chosen.

It is expected that a round trip fare, New York to Santander, will cost a minimum of \$750. In order to get the most attractive fare for all, we are working with our local travel agency on a package deal.

• for All Other Participants

Members of the Steering Committee have been working in their countries to secure funds to assist with travel. Applicants should get in touch with the appropriate person on the Committee for further information. If there is any travel money available from this office for other nationals, we will let you know in the December mailing.

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^{*} As described on page 5, our BITNET address is CLIOMETS@MIAMU. The Miami FAX operates a Sharp 700 automatic receiving unit compatible with industry standards Group II and Group III. The telephone number of the unit is 513-529-3841. Be sure to put a header on your paper directing it to The Cliometric Society and the number of pages being transmitted.

NBER Summer Institute

By

Kenneth Sokoloff, University of California, Los Angelas

John Wallis University of Maryland

Cambridge, MA - The Summer Institute of the NBER Program in the Development of the American Economy met during mid-July, with 20 economic historians in attendance. The sessions began with Rick Steckel's presentation of "The Age of Leaving Home: A View From Families Matched in Census Manuscript Schedules." The work was based on national samples drawn from the 1850 and 1860 censuses, and revealed that although a substantial proportion of children left the homes of their parents during their teens, a large fraction remained to age 25. Steckel also found a significant differential in behavior between males and females that appeared at least somewhat related to differences in the age of marriage. Given the concern over whether the evolution of industrial labor markets spurred earlier ages of leaving home, lower fertility, and higher savings rates, it was especially interesting to note the finding that children on the frontier, and in the West generally, left home at younger ages than did their counterparts in urban areas, or in the Northeast.

The program was rich in new studies of migration, as David Galenson, Clayne Pope, Allan Green and Georgia Villaflor also discussed some of their recent work on the subject. In "Economic and Geographic Mobility on the Farming Frontier: Evidence from Appanoose County, Iowa, 1850-1870," Galenson and Pope found strong evidence of high geographic mobility and rates of wealth accumulation on the frontier. They also uncovered a number of intriguing interactions between wealth and geographic mobility, including suggestions that there may have been a significant class of individuals who reaped huge returns over time by acquiring choice land in areas just prior to extensive settlement, holding these plots through the early surge of land prices, and then selling off and moving on to

repeat the process further west. Villaflor employed the descriptive lists of soldiers in the Revolutionary and Civil Wars as the basis for the analysis in "Change in Overall Levels of East-West Migration, 1775-1860." In apparent contradiction to the claim that industrialization brought more movement at earlier ages, she found only minor decreases in county persistence rates between the two wars. Migrants did, however, move greater distances on average in the latter period. In "Immigration and Regional Development: The US and Canada: A Comparative Study," Green demonstrated that although immigration to the western provinces played an important role in the development of Canada, many immigrants remained in the urban centers of Ontario and Quebec. Scholars who neglect this channel miss much of the story.

Michael Haines employed some of the old surveys on consumer expenditure carried out by Carroll Wright in his "Consumer Behavior and Immigration Assimilation: A Comparison of the US, Britain and Germany, 1889/1890." His results tended to suggest that migrants from the two latter countries to the US converged slowly on native consumption patterns. Moreover, the estimates indicated that the demand for food was price inelastic, while the demand for meat was relatively income elastic. In "Bio-Medical Approaches to the Estimation and Interpretation of Secular Trends in Equity, Morbidity, Mortality, and Labor Productivity in Europe, 1750-1980," Robert Fogel examined the additional information on nutritional status gained by the availability of data on the heights and weights of individuals. His analysis suggested that improvements in nutrition were a major contributor to the decline of mortality in Europe over the past two centuries.

In discussing a book manuscript in progress, Robert Margo presented three chapters entitled, "Schooling and the Migration of Southern Blacks to the North," "Segregated Schools and the Tiebout Hypothesis," and "The Effects of Separate-But-Equal." The first two chapters dealt with the complex interactions involved with the schooling of Blacks serving to stimulate their migration from the South, and the possibility of such migration leading counties or states to try to retain them by increasing expenditures on schools. The latter chapter showed that even if schools for Blacks had truly been separate-but-equal, with equivalent levels of resources per student, Blacks would have continued to lag far behind Whites in educational achievement and earnings.

There were several papers concerned with the antebellum economy. In "Inventive Activity in Early Industrial America: Evidence from Patent Records, 1790-1846," Kenneth Sokoloff found pro-cyclicality in patenting and a strong association between patenting and proximity to navigable waterways. Although the importance of specific mechanisms remained unclear, he argued that the evidence implied that inventive activity was positively related to the growth of markets during early industrialization. Thomas Weiss began to apply his new labor force estimates to the issue of productivity change in "Farm Productivity and Economic Growth in the US, 1800 to 1860." Working at the national level, his analysis indicated that agricultural productivity advanced at a slower rate early in the 19th century than has generally been thought.

The Institute ended with two papers on 20th-century topics. Richard Sutch presented "The Ineffectiveness of Monetary Policy During the Great Depression: The Crisis of Liquidation in the US at Certain Dates in 1932," bringing more evidence to bear against the Friedman and Schwartz interpretation of the Great Depression. In "Wages and Earnings in Coal Mining," Price Fishback presented another part of his broad study of the coal mining industry. Focusing on the early 20th century, Fish-

back found that the earnings of coal miners were highly cyclical and comparable in level to those of workers with similar characteristics in other industries. With the higher accident rates and other unpleasant conditions, however, many miners shifted out of the occupation over time.

World Congress

(Continued from page 2)

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BITNET Comes to Clio

As pathbreakers in applying the latest technology to economic history, it is only appropriate that the Cliometric Society become involved with BIT-NET, the B(ecause) I(t's) T(here) NET(work) which links faculty and graduate students from over 1600 universities worldwide through a computer communications network.

BITNET allows the user several communication capabilities. For example, one can exchange notes (i.e., 'computer mail' type messages) or send files over BITNET. The latter proves very useful when corresponding on research or submitting papers. In addition, a BITNET user has access to a variety of name, list, and file servers, which are on-line databases.

BITNET is accessed through a university's mainframe environment, but almost any PC has the capability of communicating with the mainframe through a modem. Consequently, it's very easy to use BITNET and there are software packages which can translate BITNET files to your PC platform. To gain access, consult your university's system manager for information regarding your particular hardware configuration. After that, you will be able to consult your next Cliometric Society Membership List to find the computer ID NAME of whoever you wish to communicate with over the network or you can connect with CLIOMETS @ MIAMIU and see what is available on our FILESERV.

When it is up and running in February, the Cliometric Society FILESERV will allow you to access our "server," ask for instructions, and then check our directory of papers available. If there is anything you want, you will be able to "down load" the document to your home account with a simple command.* If you wish to have a working paper added to the system you will be able to send it to us over BITNET as well.

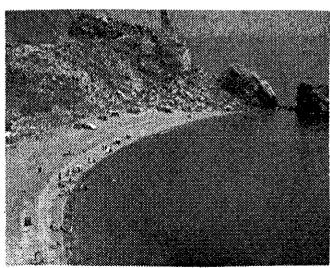
There will be more news about this service in our next Newsletter. In the mean time if you do not have a BITNET address, you may want to check how to get one, so that when it is time to renew your Cliometric membership you can put your BITNET address on the renewal form. In the mean time, any questions or other communications with us can now be done on BITNET. Again our address is CLIOMETS @MIAMIU. Of course, it's probably still easier to call.

* For example, one of the first things we will put on the server will be the list of all Clio Conference programs from 1961 to the present.

You're Right, The 'S' Is Missing

With apologies to John Hughes, the Trustees have decided to drop the s from the Cliometrics Society. It is purely a stylistic change to make us more parallel with similar organizations. Hughes first named this organization 12 years before it existed, when writing in Essays on a Mature Economy: Britain after 1840, he said, "The Purdue meetings of the group called, for fun, the Cliometrics Society..." Still, as he recently pointed out to me, the name of the American Economic Association implies a group of thrifty Americans.

Alas, what's in a name?



Spanish Coast

From 'Down Under'

Conference of the Economic History Society of Australia and New Zealand August 31 - September 2, 1988

by David Pope Australian National University

Canberra: The biennial conference of the Society was held as part of the 1988 Economics Congress. The Congress was in celebration of Australia's 200th Birthday and brought together members of the four societies representing economic history, economics, agricultural economics and econometrics. The combined meetings attracted over 600 delegates and were opened by Australia's Prime Minister, Bob Hawke, himself an economist (though this is vigorously denied by many). Among the economic historians, the award for travelling the greatest distance was jointly shared by Jeff Williamson and Bill Parker, who, in between good humoured jokes about the other's present collegiate affiliation, took opposite stances on the value of applied econometrics in history (no prize for guessing which way around!).

The papers were loosely arranged around six themes (two papers per session): "Australia's Settlement" both by blacks 40-or-more thousand years ago and by whites

in the late 18th century; "Australian Financial History," covering the crash of 1893 and the 20th century development of Australian monetary institutions; "Regional and Global Perspectives" in which France's trade in the South Pacific and comparison of the economics of Australia and Argentina were examined; "European Theatre," which looked at the not-too-artistic dimensions of the measurement of Britain's growth during the Industrial Revolution and the economic interpretation of war; and finally, "Australian Growth," in which the 'convergence' hypothesis was given a century-long test. Parker and Williamson gave well-attended addresses to the Congress on, respectively, "Understanding Productivity: 'The Ways of Economics and History' and 'Factor Market Distortions, Applied General Equilibrium and History'." In addition to these papers a session was set aside for discussion of "Tasks Ahead" in economic history, led by Parker (continental Europe), Malcolm Falkus (British), Williamson (American) and Boris Schedvin (Australian). There was also a graduate students' thesis session with topics covering the work of New South Wales' government statistician and economic historian, Sir Timothy Coghlan; the insurance market in Australia; and housewifery in rural Ireland. The commentator this year for the thesis session was Jonathan Pincus.

Abstracts in insert.

Classifieds

Extended Deadline for the Cliometric Competition #2— The Logo Task Force informs us that they have been completely underwhelmed with entries for this prestigious contest. Send your suggestions to Tom Weiss immediately so appropriate aprons, letterhead, T-shirts, etc. will be available for the Congress in Spain. Refer to the June Newsletter for details and inspiration.

Announcements: Brighton, UK - Clio has arranged with Nicholas von Tunzelman to be the North American distributors of "Mimeo Papers and Journal Articles in Economic History, March - October 1987" and "November 1987 - April 1988." If you wish to receive a copy, send \$2 per list to the Society office and we will forward the document. (We hope to talk Nick into some day entering these lists in machine-readable form so that can put them on our BITNET fileserver.)

Venice - Gianni Toniolo writes: "Starting in 1988, articles will be published by *Rivista di storia economica* in Italian or in English according to their original language. We estimate that about half the articles that will appear in each quarterly issue will be in English. Such change in editorial policy was made in order to encourage wider circulation of our journal abroad. A limited number of specimen copies of the Journal will be available on request for examination in view of library or personal subscriptions." Direct your inquiries to Gianni.

Correction: Elizabeth Field was inadvertently left out of the list of names identifying the first-time attendees at the Clio Conference in May. Ms. Field is front and center in the picture on page 8 of the June Newsletter. The editors take full responsibility for this photo faux pas. Do we have any volunteers to be the photographer at the World Congress? Black & white prints preferred and write your own captions!

Abstracts from the Conference of the Economic History Society of Australia and New Zealand August 31 - September 2, 1988 Canberra, Australia

The Palaeoconomics of Aboriginal Migration Noel Butlin Australian National University

This paper covers the proposed 75,000 years of change influencing the course of Aboriginal migration to Australia as prelude to the full-scale economic history of human beings in Australia. It presents several theoretical modes of tackling this question using conventional economists' modelling of migration push-pull factors and economic-demographic analysis in terms of changes in aggregate and relative production functions in an "ice age" context over the past 100,000 years. The paper examines Aboriginal pathways and windows of migration opportunity, using sea depth contours of the U.S. National Oceanographic and Atmospheric Administration. It suggests that the most plausible source of Aboriginal migrants was from Thailand and their most prominent staging point was through Timor. Technological change in maritime technology is prominent, along with the identification of specific "pull" and "push" factors, both of which appear as likely to be evident to early human beings in passing to Australia. The paper proposes a migration process probably beginning 70-80,000 years ago and continuing along a variable but rising path until human beings in island S.E. Asia became increasingly residential about 6-8000 years ago.

A New Look at the New South Wales Corps Pamela Statham University of Western Australia

Whilst it has been accepted for many years that the wealth acquired by the Officers of the NSW Corps was a critical factor in the rapid early development of NSW, relatively little is known about exactly when and how that wealth was acquired, and who and how many acquired it. Through a reconstruction of the Corps and, on the basis of names so revealed, a re-examination of contemporary accounts and documents it has been possible to get a clearer picture of economic activity in early, penal NSW. This paper will therefore attempt to answer the questions posed above and to set those answers in the context of the overall process of economic development in NSW to 1810.

Australian Banking Practice and the Crisis of 1893 David Merrett Monash University

This paper argues that the prudential standards observed by the Australian banking system declined substantially over the two decades prior to the bank crisis of April and May 1893. The demand for banking services, particularly loans, rose strongly. Banking was profitable which encouraged entry into the industry by new firms and the growth of competing non-bank financial intermediaries. Uncontrolled entry played a large part in the erosion of prudential standards. The average levels of risks accepted by bankers grew as competition from those inexperienced with bankers' risks put pressure on older institutions to alter their behaviour. The extent and nature of competition between financial institutions undermined the setting and observance of satisfactory prudential standards. Most of the banks established very large branch networks which challenged their abilities to devise adequate internal control mechanisms. Many bankers failed to install efficient internal management procedures. The mismatch between the maturity profile of the liability and asset side of the balance sheet increased. The quality of assets declined and risks were dangerously concentrated. Liquidity and capital ratios fell which exposed the system to an even greater danger of instability. The management practices of Australia's bankers eroded the strength of the system as a whole. They were a necessary but not a sufficient condition for the wholesale banking collapse of 1893.

The Development of Monetary Institutions in Australia George Fane Australian National University

This study deals with the development of monetary institutions and monetary policy in Australia from Federation to the Second World War, with special reference to the contribution of monetary inflation to government finance.

The history of Australian monetary arrangements in this period is viewed as a process of establishing a monopoly in seigniorage for the new Federal government and then regulating the financial system to increase the revenue from this monopoly. This process involved the establishment and subsequent expansion of an Australian note issue; the establishment of a central bank; the elimination of competing monetary media - ie private and Queensland banknotes, gold and sterling; the requisitioning of the national stocks of foreign exchange reserves; the regulation of the financial sector to raise the demand for the monetary liabilities of the central bank.

Estimates are provided of the growth of the monetary base and of the Federal government's revenue from seigniorage. This involves distinguishing between sterling and gold, on the one hand, and the remaining part of the base, which alone represents the liabilities of the Federal government. Estimates are also provided for the growth of the money supply, using both broad and narrow definitions of the money supply.

France's Business in the South Pacific Robert Aldrich University of Sydney

In the nineteenth century, France acquired a colonial empire in Oceania. The Etablissements Francais d'Océanie (Tahiti and neighbouring islands), New Caledonia and Wallis and Futuna, along with the Franco-British condominium of the New Hebrides, provided raw materials for France, including tropical agricultural and maritime products, nickel, phosphate and other minerals. Meanwhile, the French also purchased wool from Australia and New Zealand; in fact, France was the second largest purchaser of Australian wool. French banking invested in the region, particularly the Comptoir National d'Escompte (the furture BNP) and the Banque de l'Indochine, and the French shipping lines Messageries Maritimes and Ballande traded in the South Pacific.

These business activities provided profits for French companies (such as the giant Société Le Nickel) and helped develop a local élite tied to metropolitan France. Economic activities also has profound effects on the indigenous populations of the islands. However, it cannot be argued that commercial interest was the sole, or even the primary, reason for the setting-up of the French Oceanic empire or for the continued French presence in the nineteenth century. Not until the early 1900s did the island empire probably become profitable, and colonists still pleaded about underdevelopment and the need for greater French investments and a more complex infrastructure. Furthermore, France's competitors in the South Seas, including Australian, American and German traders, outdistanced France in trading, even inside the French Polynesian territory.

Recent work on European expansion by French historians suggests that colonies did not initially reap profits and that only in the twentieth century did they prove their worth. New theories also argue that there exists a complementarity betwen formal empire (the area of 'colonialism') and areas of informal economic and political interest and influence (that of 'imperialism'). With the French interests in its Oceanic empire, and its activities in the British colonies of Australasia, those hypotheses are confirmed.

Factor Market Distortions, Applied General Equilibrium and History Jeffrey G. Williamson Harvard University

What the famous labor surplus model asks is: How will an economy evolve through time if it exhibits factor market failure? What it fails to ask is: How would the economy evolve through time if those distortions were absent? Indeed, have factor market distortions been large enough to matter? Oddly enough, there has been little empirical attention to such issues beyond what turn out to be misleading deadweight loss calculations. This paper tries to fill that gap by applying a computable general equilibrium model to one developing economy, England, during the industrial revolution. The morals appear to have general application.

Economic Success and Failure of the Neo-Europes: Australia in a World Context Colin White La Trobe

This comparison of Australia and Argentina is a pilot study for a broader comparison between the Anglo and Iberian neo-Europes. The assertion of parallel development, and only temporary divergence in output per head, is amenable to direct empirical testing. A preliminary inspection of the relevant data shows a persistent rather than a temporary divergence. Such secular persistence requires explanation but none of the explanations in the relevant literature is fully persuasive. The framework of the suggested explanation, derived from a previous comparative study of Russia and America, rests on two supports. On the one side is the physical, on the other the human environment. On the one hand there was a greater incidence of shocks and a more malign risk environment in Argentina; on the other, a more flexible and appropriate institutional structure allowed a much greater responsiveness to an alien environment and to risk in Australia. The positive role of government in mitigating and managing risk is particularly noted.

Was Britain's Industrial Growth Really So Slow During the Industrial Revolution? Robert Jackson Australian National University

Historians are in deep disagreement over the rate at which industrial output grew during the industrial revolution. In a 1982 paper Harley argued that industrial output growth averaged only 1.4 to 1.6 per cent annum between 1770 and 1815. Harley's paper has been widely quoted in recent interpretations that stress the gradualness and incompleteness of Britain's economic transformation before the middle decades of the nineteenth century. Crafts, too, is a firm advocate of the view that the economy grew more slowly than was once thought. His 1985 estimate of the rate of industrial growth, however, is quite different from Harley's. According to Crafts, industrial output grew at 2.28 per cent per annum during 1770-1820. Roughly the difference between Harley's lower-bound growth and Crafts's estimate is the difference between a doubling and a tripling of British industrial output over the half-century after 1770. Both Harley and Crafts distance themselves from earlier estimates by Hoffmann and by Deane and Cole which are now generally thought to have exaggerated the rate of industrial growth. The downward revision suggested by Crafts, however, is much smaller than that suggested by Harley. Indeed, Crafts's results lie closer to Hoffmann's than to Harley's.

This disagreement over the rate of industrial growth has profound implications for the interpretation of the industrial revolution. The paper reviews the available quantitative evidence, argues for the rejection of Harley's estimates, and suggests that Crafts's more likely to have understated than overstated the rate of industrial growth in the critical early period of industrialization. It would appear that industrial growth was faster than we have come to believe.

Aconomic Interpretation of War: The German Submarine Campaign 1915-1918

Avner Offer

Australian National University

There are two approaches to an economic interpretation of war: (a) To identify factor constraints on the decision for war, its management and its outcome and (b) To seek for patterns of rationality in the planning, conduct and conclusion of wars. The "prisoner's dilemma" shows how unfavourable outcomes can flow from rational action but its merit is also its defect: It can explain almost any outcome. It also shows that markets alone cannot always deliver acceptable outcomes. Without a quantitative sample, the economic history of war is more akin to business history when it attempts to explain why a policy did not succeed. It raises the question of why (given the assumption of rationality) there are losers as well as winners. I apply two notions of bounded rationality. One, from economics, is the notion of "imperfect calculation". The other, from social psychology, is the concept of "intuitive reasoning". The German decision to begin unrestricted submarine warfare in the First World War was both a resource and a rationality problem. it was a crucial "second decision for war", this time with the United States, and its results were disastrous for Germany. The German admiralty went through the motions of rational analysis but the conceptual tools it actually applied were not appropriate. This error is a typical form of intuitive reasoning. However, when economic rationality is applied outside its sphere of validity, it can also become a form of "intuitive reasoning". This is demonstrated in some decisions of the Systems Analysis Office in the American Department of Defense during the Vietnam war, where optimizing principles were applied with equally disastrous results.

Changing Economic Leadership and Comparative Growth: Convergence, Historically Considered I. W. McLean and D. T. Nguyen University of Adelaide

A number of recent studies have explored the tendency during the postwar period for per capita income levels in the advanced economies to converge on that of the United States, which implies that richer countries tend to grow less rapidly. In one study, about half the variation in OECD postwar (per capita) growth rates was accounted for by the extent to which per capita income levels at the beginning of the period lagged behind that of the U.S. (Dowrick and Nguyen 1987). The existence of convergence has also been detected in a wider sample of countries during the postwar years (Kormendi and Meguire 1985), and over the past century for those few countries for which suitable time series exist (Abramovitz, 1986; Baumol 1986).

This paper focuses on the very long evidence, and extends the analysis of the convergence phenomenon in several important respects. First, more stringent tests are applied in assessing the evidence for convergence since 1870, including the question of parameter stability. Second, convergence is incorporated in a broader formal model of growth which is then tested against the historical evidence of such influences as investment and export ratios. Third, consideration is given to the mechanisms by which convergence has occurred historically, focussing particularly on the role of the international economy. Finally, the paper addresses the issue of the determinants of changes in economic leadership and its concomitant, the relative decline of some economies, by attempting an integration of the recent work by economists on postwar convergence with the substantial economic history literature purporting to explain earlier episodes of changing leadership and changes in relative economic backwardness.

Understanding Productivity: The Ways of Economics and of History William Parker Yale University

In modern economics, productivity and productivity growth have been important concepts and productivity measurements have been used to point out policy problems and to guide policy measures. In three areas, these tools have been especially employed: (1) in Keynesian models used for stabilization and incomes policy, (2) in development economics to make international comparisons and measure progress, (3) in assessing international competitiveness of the industrial economies and their prospects for continued growth. The aggregate production function showing output as a function of inputs of capital, resources, labour, and a 'residual' has been the main econometric device in this work. But in measuring capital for this purpose, and even more in 'partitioning' the residual between technical change, organizational change, education, motivations, and other elements of social and intellectual history, the use of a production function becomes inappropriate.

This paper reviews in very summary terms the development of income accounting and productivity measurement from Quesnay through Kuznets and Solow and includes an intemperate attack on econometricians who reject any other alternative approaches to knowledge. The approach appears to have encountered serious logical dilemmas where the concepts of capital, technology, legal forms and customs, and the formation of the human actors in innovation and progress cannot be measured and costed inputs derived as arguments in the production function. Since all these intangibles are increasingly of prime relevance in economic growth, the challenge is to economic history to offer sensible, sensitive discourse—in verbal generalizations and historical narratives, guided by massed statistical data where it is available but integrated and animated by impressions (or hypotheses) derived from the historian's surveys of the social scene. To make this point concretely, the paper takes the risk of offering in very rough and ready fashion, such a survey of the course of American productivity growth since 1870.

sir Timothy Coghlan: From Statistics to Economic History

Marnie Haig-Muir Deakin University

This paper forms part of a larger project examining the intellectual history of Australian Economic History between 1918 and 1965. It covers the early development of the discipline through the life and work of Sir Timothy Coghlan, the first New South Wales colonial government statistician. The paper is work in progress which looks at Coghlan, his career and intellectual context, and how these relate to the main concepts, assumptions and arguments used in his magnum opus, Labour and Industry in Australia (1918).

The analytical material is based on a close reading of Labour and Industry: a pioneering work in Australian economic and social history, and accepted starting point for any historiographical study of the discipline as a distinct professional area. The book has been an important influence on the development of Australian Economic History. However, the influence has been curiously indirect because much of the substance, method and argument of Labour and Industry has been assimilated into the corpus of mainstream Australian Economic History, and is often difficult to tease out.

Coghlan's statistical expertise provided the data base underpinning the view of Australian economic development presented in *Labour and Industry*. His vision of the colonial economies and their evolution from 1788 to 1901 focussed on patterns and processes of economic growth and changes in living standards

Behaviour of the Insurance Market in Australia Under Self-Regulation, Competition and Regulation 1950 to 1985

Rodney L. Benjamin
University of Melbourne

The topic of the thesis from which this paper is drawn is a study of regulation and competition in non-life insurance markets in Australia for 150 years from the mid 1830s.

The only early government regulation of the industry was scattered Colonial and State legislation which required small deposits for licenses to transact business. The Federal Insurance Act 1932 over-ruled state legislation; it required deposits from non-life insurers, but did not attempt other regulation. In 1973 comprehensive Commonwealth solvency legislation was introduced. This was followed in 1984 by two further Acts. One regulated insurance intermediaries. The other prescribed standard cover in certain areas of domestic insurance, and changed the common law, as it related to insurance, on a variety of matters.

However, from 1897 to 1974 the Australian insurance market was largely controlled by a combination of mostly British insurance companies, known as the 'Tariff', which set prices, products and distribution practices. This combines was disbanded in the face of the Trade Practices Act 1974, but it had come under mounting pressure from local and overseas competition from the mid 1950s. By 1970 the Tariff had largely lost control.

The period from 1950 to 1985 should present a rare opportunity to observe the consequences of self-regulation, then competition followed by government regulation in the same insurance market. The paper examines the data available to determine whether it is possible to draw valid conclusions about market behaviour, and concludes that the imperfections of data and the intrusion of external factors (the influence of overseas insurance market trends, competition from state insurers, local natural disasters and government intervention into statutory insurances) prevents an adequate analysis.

Husbandry to Housewifery: The Human Significance of Development of Rural Ireland, 1890-1914

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Agricultural development in Ireland between 1890 and 1914 led to a reallocation of female labour from the market sector to the non-market or household sector. State and private investment in the rural economy had achieved remarkable success in dealing with the problem of land and labour productivity. In particular, investment in educational schemes for women eased the transition from market to the household. Although arguments such as health improvement, national pride and ideology regarding 'Womanhood' were used to justify human capital investment by institutions, domestic economy classes were promoted primarily for their expected economic return. As contemporaries stressed, they could not afford to lower the ideal of the home. Classes in domestic economy aimed at providing Irish women with a rationale for remaining in Ireland to provide (without payment) the 'improved' goods and services to support a 'modernising' rural economy. In labour-surplus communities experiencing a contraction of employment in textiles, domestic service and agricultural labouring, women chose to maximise their economic contribution by focussing their energies into familial domestic work. Education in house wifery was one expression of this maximisation process.