An integrative and dynamic analysis of business bankruptcy in Australia

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AN INTEGRATIVE AND DYNAMIC ANALYSIS OF BUSINESS

BANKRUPTCY IN AUSTRALIA*

*A thesis submitted in fulfilment of the requirements for the
award of the degree

Doctor of Philosophy

from

UNIVERSITY OF WOLLONGONG

by

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Bachelor of Commerce (University of Wollongong)

Master of Commerce (University of Wollongong)

Department of Economics

1998
DECLARATION

I hereby certify that this thesis has not been submitted previously as part of the requirements of another degree and that it is the result of my own independent research.

Lillian Cheung
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ABSTRACT

This thesis proposes an integrative and dynamic approach for assessing the effects of linkages across industries, industry-specific conditions, aggregate domestic economic conditions and international economic conditions on the rates of bankruptcy in six of Australia's major industries: primary production, mining and quarrying, manufacturing, building and construction, transport, storage and communication and finance and property. The effects of these factors are estimated within a dynamic and simultaneous-equation system with pooled cross-state time-series observations for the period 1978 to 1992. In addition, preliminary tests of cointegration and causality are conducted with nation-wide time-series data for the period 1973 to 1992 in order to explore the possible linkages among industries' bankruptcy rates.

The estimation results of the preliminary analyses and the dynamic and simultaneous equation system have both suggested inter-industry linkages among bankruptcy rates. Moreover, the estimation results of the simultaneous-equation system have lent support to the survival of the fittest hypothesis for all industries studied. A number of other economic variables have also been found to be significantly associated with business bankruptcy rates, which include industry-specific variables such as the number of industrial disputes, housing prices and manufacturing wage rate; domestic economic variables such as state per-capita income, federal government spending, personal income tax rate, interest rate and money supply; as well as international economic factors such as exchange rate, world prices and Japan’s GDP. Among these variables, government policy instruments have been found to have relatively larger effects on the rates of bankruptcy. The estimation results of these analyses might help policy-makers design a comprehensive stabilisation policy for the Australian business sector.