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**Product Innovation and Differentiation,
Intra-Industry Trade
and
Growth**

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for the Degree of Doctor of Philosophy

by

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Abstract

This thesis deals with one aspect of the economics of differentiated goods. Innovative goods are considered to be new goods created by a deliberate innovative process motivated by an anticipated demand for the new good. The proposition is that, amongst the developed economies, the higher the level of production of innovative goods within a country, the higher the GDP growth rate, all else being equal. In the presence of barriers to entry, this would provide economic justification for policies designed to increase the national level of production of innovative goods.

The proposed mechanism is as follows. With continuing product innovation the share of expenditure on innovative goods will increase, resulting in an increasing import demand for, and consequent increasing exports of, innovative goods. All else being equal the higher the innovative good content of a country's exports the higher the export growth rate and the higher the GDP growth rate consistent with balanced trade which can be maintained.

The theory behind this mechanism is developed and explained. A method of identifying innovative goods is developed, and using this method a number of hypotheses derived from the proposed mechanism are empirically tested using trade data from 25 countries. All four hypotheses are supported by the results, and it is concluded that the growth rate of developed economies is increasing in the level of production of innovative goods.

The implications of this result is discussed, including potential barriers to entry into the production of innovative goods and examples of policies designed to overcome these barriers. It is concluded that such policies can be considered as being in the national interest.