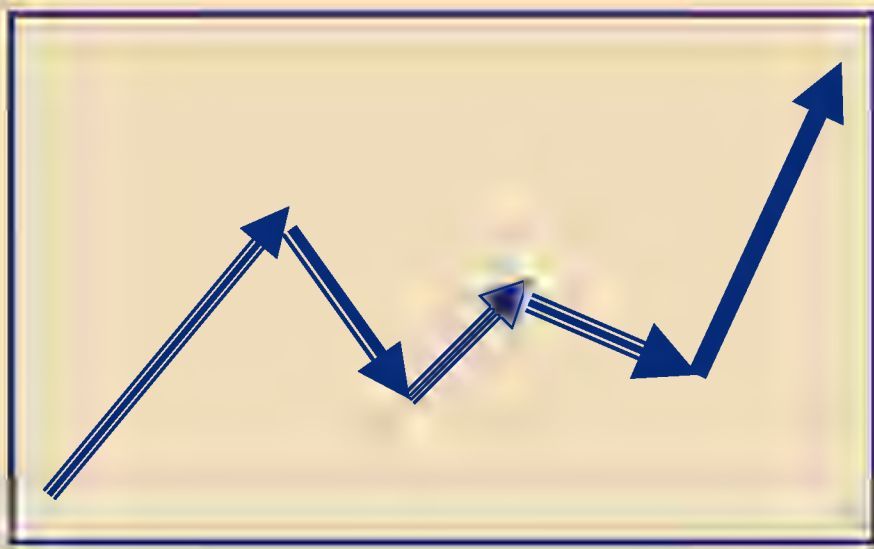


STANISŁAW PIASECKI
and
JAN W. OWSIŃSKI

**AN INTRODUCTION
TO A THEORY
OF MARKET COMPETITION**

Volume I



Warsaw 2011

STANISŁAW PIASECKI
and
JAN W. OWSIŃSKI

**AN INTRODUCTION
TO A THEORY
OF MARKET COMPETITION**

Volume I

Warsaw 2011

All the rights to the material, contained in this book, remain with the authors. For all enquiries, please address Jan W. Owsński, Aplikancka 3, 02-075 Warszawa, Poland, owsinski@ibspan.waw.pl

© by Stanisław Piasecki & Jan W. Owsński

Warsaw, January 2011

Table of Contents

<i>INTRODUCTION</i>	5
Chapter I. SOME NOTIONS AND ASSUMPTIONS	
1. Dependence of demand upon product price	9
2. Cost and profitability of production activity	32
3. Classification of adopted models of economic activity	51
Chapter II. ACTIVITY OF A LOCAL COMPANY	
1. Introduction	53
2. Some elementary models	55
3. Basic models	67
Chapter III. ACTIVITY OF A LOCAL COMPANY IN THE ENVIRONMENT OF DISPERSED CUSTOMERS	
1. Activity under even spatial customer distribution	85
2. A complex model with product delivery costs	102
Chapter IV. OPTIMISING THE ACTIVITY OF A GLOBAL COMPANY	
1. Models of companies for constant spatial densities of potential customers	111

2. Model of a global company with product delivery and variable sales price in distant branch facilities	115
3. Model of a company selling its product for a constant price in the entire network irrespective of distance from the centre to a branch	119
4. Basic model of a global company with variable density of customers	120
5. Network optimisation for a global company functioning on several markets	140
6. Market competition for the basic model with delivery cost and uneven density of customers	144

Chapter V. THE POSSIBILITIES OF DEFENDING A MARKET SHARE

1. The strategies of defence of the share owned	147
2. A summary of the book	157
3. The future of world economy	161

REFERENCES	166
-------------------	-----

This book presents a complete exposition of a coherent and far-reaching theory of market competition. It is based on simple precepts, does not require deep knowledge of either economics or mathematics, and is therefore aimed primarily at undergraduate students and all those trying to put in order their vision of how the essential market mechanisms might work. Volume II, now in preparation, shall bring the theory to further problems and results.

The logic of the presentation is straightforward; it associates the microeconomic elements to arrive at both more general conclusions and at concrete formulae defining the way the market mechanisms work under definite assumed conditions.

Some may consider this exposition too simplistic. In fact, it is deliberately kept very simple, for heuristic purposes, as well as in order to make the conclusions more clear. Adding a lot of details that make theory more realistic – these details, indeed, changing from country to country, and from sector to sector – is mainly left to the Reader, who is supposed to be able to design the more accurate image on the basis of the foundations, provided in the book.

© is with the authors.

All enquiries should be addressed to

Jan W. Owsinski, owsinski@ibspan.waw.pl