612 Appendix G

RUN FIG. 47: STABILIZED WORLD MODEL II
C FUESY-2000
C DISI-100
C DISI-100
C PYTAM-2000
C PYTAM-2000
C PYTAM-2000
C PYTAM-2000
R FIG. 48: STABILIZATION POLICIES IN THE YEAR 2000

List of Figures

REFERENCES

Forrester 1961	Forrester, Jay W. Industrial The M.I.T. Press, 1961.	Dynamics.	Cambridge,	Mass
Forrester 1968	Forrester, Jay W. Principles Wright-Allen Press, 1968.	of Systems.	Cambridge,	Mass
Pugh 1970	Pugh, A.L. III. DYNAMO II Usi	er's Manual	. Cambridge,	Mass

Pugh, A.L.	III.DY	NAMO II User	's Manual	. Cambridge, Mass.:	
The MIT	Press.	1970			

The	M	I.T.	Press.	1970

1-1	Four possible modes of population growth	8
1-2	Interactions among the five basic sectors of World3	11
1-3	Causal-loop diagram of several important feedback loops in World3	14
2-1	Population-resource feedback loops	29
2-2	Global population growth, 1650-2000	32
2-3	Regional population growth, 1920-2000	33
2-4	Regional and world rates of natural increase, 1900-1970	34
2-5	Crude death rates, Sweden and France, 1780-1965	35
2-6	National crude death rates and life expectancies, 1900-1970	36
2-7	National crude birth rates, 1900-1970	37
2-8	Crude birth rates versus GNP per capita, 1971	38
2.9	Population age structures	40
2-10	Population momentum, the United States and India, 1950-2050	41
2-11	Demographic transition versus time, Sweden and the United States	44
2-12	Demographic transition versus GNP per capita, Sweden and the United States	45
2-13	Crude death rates versus GNP per capita, 1971	46
2-14	Percentage of world population at various stages of the demographic transition	46
2-15	Demographic and external determinants of birth and death rates	47
2-16	External determinants of birth and death rates	48
2-17	Population sector feedback loops	51
2-18	Demographic feedback loops	52
2-19	Feedback loops through life expectancy	53
2-20	Feedback loops through fertility	54
2-21	DYNAMO flow diagram—one age level	56
2-22	World population estimates and forecasts	57
2-23	Food per capita versus life expectancy	60
2-24	Doctors per capita versus life expectancy	61
2-25	Doctors per capita versus food per capita	62
2-26	Life expectancies of preindustrial populations	62
2-27	The effects of food distribution on the lifetime multiplier from food	65
-		612