



PPIPE

PUSAT PENGKAJIAN INDUSTRI PROSES DAN ENERGI



DISRUPTION ERA: ECONOMY AND TECHNOLOGY PERSPECTIVE

AIRLANGGA INTERNATIONAL CONFERENCE ON ECONOMICS AND BUSINESS
2018

Socia Prihawantoro

Five causes of disruption (Cragun & Sweetman, 2016)

1. Technology, especially information technology
2. New theory of management
3. Economic events
4. Global competitiveness
5. Geopolitics

Economy

- Growth
- Employment
- Value Added (GDP)

Sector Category in Disruption Era

- Sectors whose nominal value is relatively fixed, some subsectors reduce and some are increase
- Sector whose nominal value is increase
- Sectors whose nominal value is decrease
 - Shifting from formal to informal

Sectors with the highest growth

No	Sectors	2017	2016
1	Information and Communication	9.81	8.87
2	Other Services	8.66	7.80
3	Transportation and Warehousing	8.49	7.74
4	Business Services	8.44	7.36
5	Construction	6.79	5.22
6	Financial and Insurance Services	5.48	8.90
	Indonesian Economic Growth	5.07	5.02

Information and Communication Sector shows high performance in growth

ICT Subsectors and Multipliers (I-O, 2010)

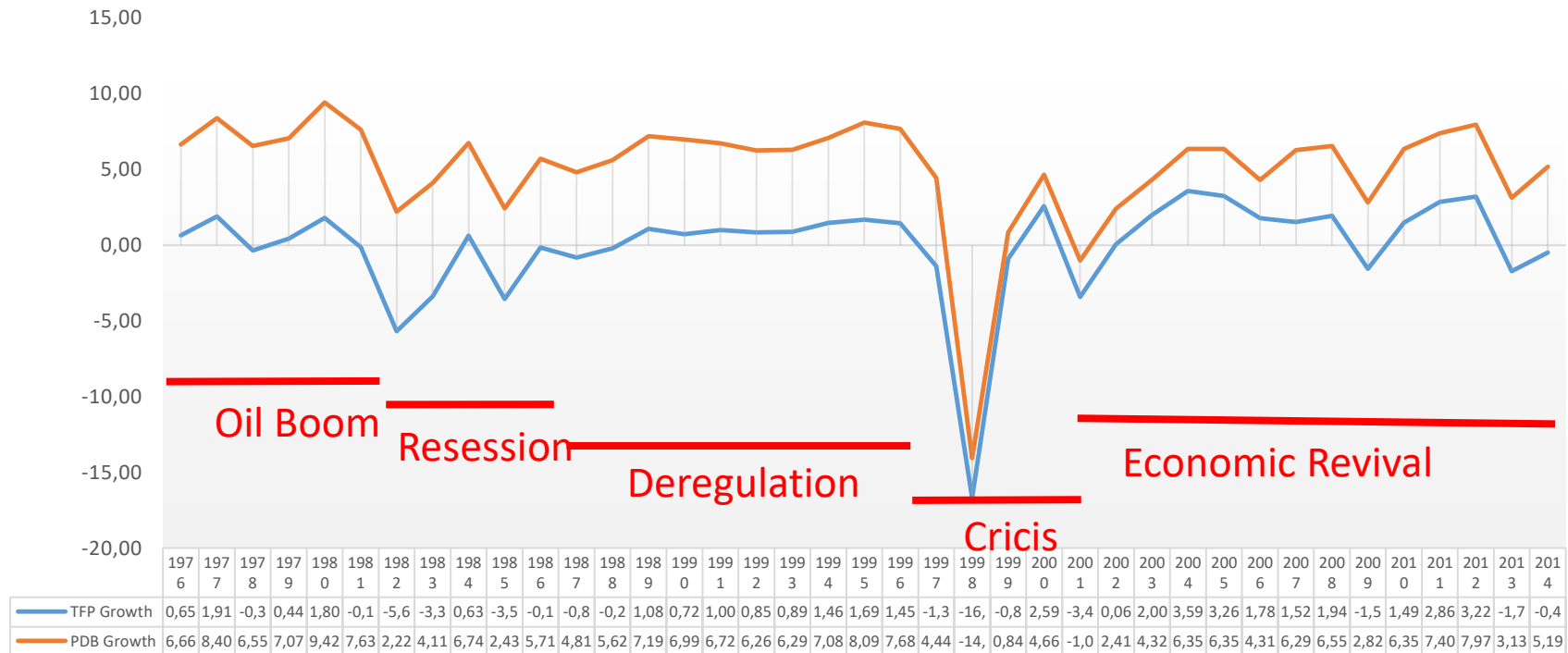
No	Subsectors	Multiplier			
		Output	Labor	Income	Value Added
1	COMMUNICATION TRANSMISSION EQUIPMENT INDUSTRY	2,28	7,55	3,70	2,91
2	INDUSTRY OF RADIO, TV, SOUND RECORDING TOOLS AND PICTURES, AND THE LIKE	2,22	7,04	3,23	2,58
3	SOFTWARE CONSULTATION SERVICES	2,01	3,54	2,29	1,91
4	FIXED GOVERNMENT PHONE	1,94	2,95	1,94	1,73
5	FIXED PRIVATE PHONE	1,95	2,10	1,97	1,75
6	MOBILE TELECOMMUNICATION SYSTEM GOVERNMENT	1,97	3,38	2,02	1,79
7	MOBILE MOBILE TELECOMMUNICATION SYSTEM PRIVATE	1,92	2,07	1,92	1,71
8	CALL FOR GENERAL RADIO SERVICES	2,02	2,20	2,12	1,87
9	TRUNKING RADIO SERVICES	1,96	2,11	1,99	1,77
10	COMMUNICATION SYSTEM SERVICES	1,93	2,08	1,93	1,72
11	SATELLITE SERVICES	1,92	2,06	1,91	1,70
12	PACKAGE / JDKP COMMUNICATION SERVICES (PROVIDER)	1,92	2,07	1,92	1,71
13	OTHER COMMUNICATION	2,03	2,37	2,10	1,87

Projection

- 2017
 - National GDP: Rp.13.588.797,3 billion
 - ICT GDP : Rp. 515.888,9 billion (3,8% of national GDP)
- 2018
 - GDP growth 5,1% → Rp. 693 028,662 billion
 - ICT growth 10% → Rp. 51.588,89 billion
 - GDP growth, effect of multiplier of ICT growth → Rp. 95.685,07 billion
 - Share ICT growth plus multiplier to GDP growth → 13,81%

Technology: Total Factor Productivity

Economic Growth and TFP Indonesia (%) 1976-2014

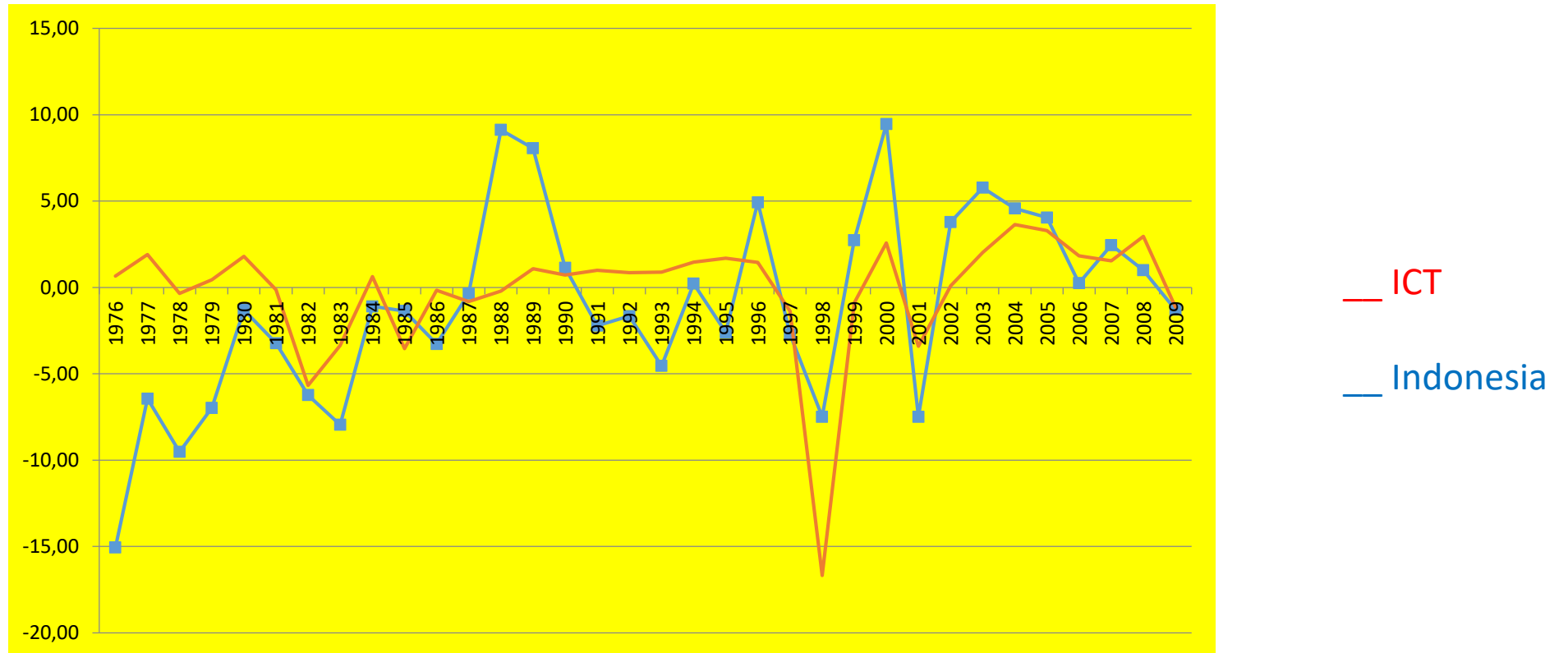


The disruption era occurred in the economic revival era

TFP:

- ICT Sector

- Indonesia



Policy

- Short term
 - Regulation: new sector
 - Start up compeny
- Long term
 - Education
 - Research
 - Technology

Thank you