

东道国的专利保护强度如何影响 跨国企业的市场进入方式

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1. 100081 2. 100028

摘要:

2 1 3

关键词:

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一、问题的提出

MNEs 1-2 Multinational Enterprises 3-5
1 4 6-9

WDI 1990—2008

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30-31

1990—2008

FDI

Smith²⁹

三、专利保护影响跨国企业市场进入策略的机制：理论假说

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假说 1:在控制其他因素的影响后,东道国专利保护强度提高对跨国企业的出口、跨国直接投资和许可生产均有正向的促进作用。



假说 2:在控制其他因素的影响后,专利保护强度提高对跨国企业出口、FDI 和许可生产的促进作用随着东道国模仿能力的增强而增大。

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假说 3:在控制其他因素的影响后,东道国专利保护强度提高对跨国企业出口、跨国直接投资和许可生产的促进作用依次增大。

②

四、模型设定与数据

③

$$y_i = e^{a_{i0}} \times e^{a_{i1} \cdot IPP} \times PGDP^{a_{i2}} \times POP^{a_{i3}} \times e^{a_{i4} \cdot TAX} \times TIME^{a_{i5}} \times e^{a_{i6} \cdot ENTRY} \times e^{\tau_i} \quad 1 \quad ④$$

$y_i \quad i = 1 \quad 2 \quad 3$
 $y_1 \quad y_2 \quad y_3$

$IPP \quad PGDP \quad POP \quad TAX \quad TIME \quad ENTRY \quad \tau$

GDP

GDP

$$y_i = e^{b_{i0}} \times e^{b_{i1} \cdot IPP} \times e^{b_{i2} \cdot IPP \times IMT} \times e^{b_{i3} \cdot IMT} \times POP^{b_{i4}} \times e^{b_{i5} \cdot TAX} \times TIME^{b_{i6}} \times e^{b_{i7} \cdot ENTRY} \times e^{\varepsilon_i} \quad 2$$

IMT
⑤
1
1
2

$$\ln y_i = a_{i0} + a_{i1} \times IPP + a_{i2} \ln PGDP + a_{i3} \ln POP + a_{i4} \times TAX + a_{i5} \ln TIME + a_{i6} \times ENTRY + \tau_i \quad 3$$

$$\ln y_i = b_{i0} + b_{i1} \times IPP + b_{i2} \times IPP \times IMT + b_{i3} \times IMT + b_{i4} \ln POP + b_{i5} \times TAX + b_{i6} \times \ln TIME + b_{i7} \times ENTRY + \varepsilon_i \quad 4$$

$$a_{i1} \quad i = 1 \quad 2 \quad 3 \quad 0 \quad 1 \quad b_{i2} \quad i = 1 \quad 2 \quad 3 \quad 0$$

$$2 \quad a_{i1} \quad i = 1 \quad 2 \quad 3 \quad 0 \quad a_{11} < a_{21} < a_{31}$$

$$3 \quad 4$$

FDI

SUR

SUR

42-43

⑥

SUR

Dum

$$1 \quad 0$$

$$1 \quad 0 \quad 1$$

$$0 \quad 5$$

$$\ln y_i = c_{i0} + c_{i1} \times IPP + c_{i2} \ln PGDP + c_{i3} \ln POP + c_{i4} \times TAX + c_{i5} \ln TIME + c_{i6} \times ENTRY + c_{i7} \times Dum \times IPP + c_{i8} \times Dum \times \ln PGDP + c_{i9} \times Dum \times \ln POP + c_{i10} \times Dum \times TAX + c_{i11} \times Dum \times \ln TIME + c_{i12} \times Dum \times ENTRY + \varepsilon_i \quad 5$$

$$c_{i7} \quad c_{i7}$$

c_{17}

c_{17}

WDI

IMP FDI ⑦

FDI

ROY

表 1 主要变量的描述统计(样本量 = 72)

G-P						
IPP	IMP		1.21E + 11	2.90E + 11	1.68E + 09	1.91E + 12
	FDI		1.65E + 10	3.55E + 10	5.00E + 07	2.38E + 11
	ROY		1.63E + 09	3.97E + 09	1 214 869	2.49E + 10
	IPP	G - P	3.766 667	0.775 089	1.87	4.88
	PGDP	GDP	11 206.82	11 818.6	243.2	41 581
	POP		6.85E + 07	1.82E + 08	287 128.8	1.12E + 09
	ENTRY	%	8.979 399	3.196 451	3	16.5
	TIME		597.871 5	314.503 4	210	1 442
	TAX	%	5.365 046	8.477 965	0	34.4

FDI ROY IMP 2000

G-P

0 ~ 5
45-46 ⑧

FDI 10% 10%
ENTRY

1960—2005

GDP PGDP POP ⑨

ENTRY

TAX

TIME

INC

41

GDP

IMT = 1

WDI

1995

1995—1999

4

1990—1994

1995—1999

2000—2004

2005—2008

1

五、实证结果

FDI

2

WDI

表 2 专利保护与各类跨国经济活动的相关系数

	<i>IMP</i>	<i>FDI</i>	<i>ROY</i>		<i>IMP</i>	<i>FDI</i>	<i>ROY</i>
<i>FDI</i>	0.817 6 *	1		<i>FDI</i>	0.780 6 *	1	
<i>ROY</i>	0.890 7 *	0.689 5 *	1	<i>ROY</i>	0.871 8 *	0.630 9 *	1
<i>IPP</i>	0.440 2 *	0.429 2 *	0.446 8 *	<i>IPP</i>	0.418 0 *	0.432 9 *	0.445 2 *

	<i>IMP</i>	<i>FDI</i>	<i>ROY</i>		<i>IMP</i>	<i>FDI</i>	<i>ROY</i>
<i>FDI</i>	0.822 2 *	1		<i>FDI</i>	0.903 8 *	1	
<i>ROY</i>	0.704 6 *	0.741 3 *	1	<i>ROY</i>	0.279 0 *	-0.02	1
<i>IPP</i>	0.301 7 *	0.300 3 *	0.296 1 *	<i>IPP</i>	0.223 9 *	0.251 4 *	0.175

* 0.1

FDI

FDI

FDI

3

FDI

FDI

0.75

FDI 0.431

GDP

0.166

FDI

表 3 专利保护对跨国企业
各种市场进入方式的绝对影响

	1 <i>IMP</i>	2 <i>FDI</i>	3 <i>ROY</i>
<i>IPP</i>	0.166 0.137	0.431 ** 0.182	0.750 ** 0.368
<i>PGDP</i>	0.836 *** 0.057 5	0.774 *** 0.108	0.938 *** 0.141
<i>POP</i>	0.804 *** 0.037 2	0.751 *** 0.052 0	0.979 *** 0.126
<i>TAX</i>	-0.007 20 0.011 2	-0.023 2 0.016 9	0.002 39 0.024 1
<i>ENTRY</i>	-0.010 9 0.014 0	0.041 8 0.029 5	-0.043 4 0.037 0
<i>TIME</i>	-0.122 0.099 4	0.050 2 0.227	-0.891 ** 0.350
	4.106 *** 1.009	1.184 2.190	-1.683 3.104
<i>R</i> ²	0.936 76	0.853 80	0.806 76

* $p < 0.1$ ** $p <$

0.05 *** $p < 0.01$

4

5%

表4 专利保护在模仿能力不同的国家中的作用效果

		1	2	3
		<i>IMP</i>	<i>FDI</i>	<i>ROY</i>
<i>IPP</i>		-0.013 2	0.431	0.291
		0.339	0.385	0.537
<i>IPP</i> × <i>IMT</i>		0.836 **	0.530	1.189 **
		0.321	0.354	0.538
<i>IMT</i>		-1.619	-0.472	-2.565
		1.271	1.371	2.130
<i>POP</i>		0.703 ***	0.676 ***	0.882 ***
		0.052 2	0.064 7	0.120
<i>TAX</i>		-0.048 0 **	-0.052 5 **	-0.047 3
		0.018 8	0.023 8	0.028 6
<i>ENTRY</i>		0.025 0	0.071 3 *	-0.004 64
		0.030 8	0.036 2	0.052 8
<i>TIME</i>		-0.315	-0.141	-1.138 **
		0.210	0.256	0.445
<i>R</i> ²		13.32 ***	8.821 ***	9.364 **
		2.240	2.732	3.611
<i>R</i> ²		0.818	0.793	0.763
		76	80	76

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

表5 不同收入水平国家 *IPP* 对各种市场进入方式的影响

		<i>IMP</i>	<i>FDI</i>	<i>ROY</i>	<i>IMP</i>	<i>FDI</i>	<i>ROY</i>
<i>IPP</i>		0.220	0.584 **	0.983 **	0.260	0.580 *	0.394
		0.187	0.244	0.482	0.208	0.269	0.653
<i>PGDP</i>		0.726 ***	0.553 ***	0.741 ***	1.199 ***	1.455 ***	1.393 **
		0.066 8	0.146	0.208	0.163	0.374	0.457
<i>POP</i>		0.773 ***	0.689 ***	0.933 ***	0.877 ***	0.774 ***	1.076 ***
		0.054 1	0.060 4	0.177	0.074 4	0.160	0.171
<i>TAX</i>		-0.019 2	-0.005 71	-0.005 85	0.023 0	0.011 7	0.028 7
		0.034 5	0.025 9	0.029 8	0.014 3	0.032 7	0.043 7
<i>ENTRY</i>		-0.013 6	0.028 4	-0.007 22	-0.036 9	0.041 7	-0.273 **
		0.016 7	0.031 0	0.040 3	0.033 1	0.074 7	0.091 8
<i>TIME</i>		-0.167	-0.131	-0.708	-0.370	0.232	-2.169 ***
		0.129	0.238	0.454	0.284	0.543	0.645
<i>R</i> ²		5.771 ***	4.843 *	-1.465	1.459	-5.717	3.977
		1.292	2.452	4.299	1.335	4.851	3.696
<i>R</i> ²		0.908	0.811	0.769	0.968	0.846	0.852
		56	60	57	20	20	19

* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

IPP GDP

5

100

表 6 专利保护对跨国企业
各种市场进入方式的绝对影响 (SUR 回归)

				IMP	FDI	ROY	
4	SUR	SUR	3 ~	IPP	0.125	0.464 **	0.884 ***
				PGDP	0.107	0.192	0.265
1 ~ 3	FDI	FDI	6 6	POP	0.841 ***	0.752 ***	0.915 ***
				TAX	0.055	0.099	0.136
0.125	FDI	SUR	0.884 0.464	ENTRY	0.814 ***	0.765 ***	0.978 ***
				TIME	0.037	0.066	0.091
IPP	Wald	Wald	11.64%	TAX	-0.011	-0.026	0.003
				FDI	0.009	0.016	0.022
11.32	Wald	Wald	11.32	ENTRY	-0.008	0.046	-0.060
				FDI	0.018	0.032	0.043
1%	Wald	Wald	5%	TIME	-0.112	0.212	-0.533 *
				FDI	0.122	0.220	0.304
4.80	Wald	Wald	11.64%	IPP	3.981 ***	—	-4.137
				FDI	1.137	—	2.821
5%	Wald	Wald	11.64%	R ²		0.934	
				FDI		-180.18	
4	Wald	Wald	11.64%			72	
				FDI			

* p < 0.1 ** p < 0.05 *** p < 0.01

表 7 专利保护在模仿能力不同的
国家中的作用效果 (SUR 回归)

				IMP	FDI	ROY	
7	SUR	SUR	3	IPP	-0.013	0.568	0.521
				IPP × IMT	0.290	0.370	0.490
3	SUR	SUR	3	IPP × IMT	0.751 **	0.336	1.050 **
				IMT	0.297	0.379	0.501
3	SUR	SUR	3	POP	-1.280	0.226	-2.109
				TAX	1.079	1.378	1.824
3	SUR	SUR	3	POP	0.721 ***	0.695 ***	0.882 ***
				TAX	0.059	0.076	0.100
3	SUR	SUR	3	TIME	-0.049 ***	-0.048 **	-0.043
				ENTRY	0.016	0.021	0.028
3	SUR	SUR	3	TIME	0.024	0.066 *	-0.024
				TIME	0.029	0.037	0.049
3	SUR	SUR	3	TIME	-0.318	0.011	-0.777 **
				TIME	0.205	0.261	0.346
3	SUR	SUR	3	IPP	13.054 ***	—	6.422 **
				IPP × IMT	1.933	—	3.266
3	SUR	SUR	3	R ²		0.820	
				IPP × IMT		-215.700	
3	SUR	SUR	3			72	
				IPP × IMT			

* p < 0.1 ** p < 0.05

*** p < 0.01

$DUM \times ENTRY$

FDI_CODE

ROY_CODE

FDI

2 ~ 4

2

$DUM \times IPP$

3

$DUM \times IPP$

Falvey *et al.*¹⁶

Yu¹⁷

Park and Lippoldt¹⁹

4

$DUM \times IPP$

$ENTRY$

FDI

TIME

六、结论

1990—2008

FDI

FDI

FDI

GDP

FDI

GDP

FDI⁴⁸

FDI

注释:

- ① Hassan *et al.*²² Hu and Jaffe²³
- ② Grossman and Helpman³⁸ FDI
- ③ Deardorff³⁹ Markusen and Venables⁴⁰ FDI
- 29
- ④ t
- ⑤ Chen and Puttitanun⁴¹ *IMT*
- $= 1$ *IMT* PGDP
- ⑥ McDowell⁴⁴
- ⑦ FDI
- ⑧
- ⑨ Auriol and Bian-
- cini⁴⁷
- ⑩ GDP

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How does the host country's patent protection affect multinational enterprises' market access strategies

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Abstract With the development of economic globalization and intellectualization in depth the patent protection as the core of the system construction has increasingly become an important factor affecting multinational enterprises' MNEs market access strategies. Using cross-country data we explore the effects of host country's patent protection strength on MNEs' choice of market access strategies export FDI or licensed production and obtain three main conclusions as follows 1 If the host country strengthens its patent protection MNEs will increase economic activity in its territory including export FDI and licensed production 2 The impact of strengthening patent protection is higher for countries with higher imitation ability 3 The impact of patent protection on MNEs' export FDI and licensed production is increasing in turn and this incremental effect can be explained to a large extent by ownership advantage location distribution and internalization.

Key words patent protection strength export FDI licensed production market entry