





“ ”

2014-2015

“ ”

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2014

1. 2010-2011 2012.04
2. 2011-2012 2012.12
3. 2012-2013 2013.12
4. 2013-2014 2014.12
5. 2011 2011
6. 2012 2012
7. 2013 2013
8. 2014 2014
9. 2014 2014
10. “ ” 49 -72 2011-2014
11. 2012.09
12. (2010-2020) 2010.06
13. (2010-2020) 2010.10
14. “ ” 2020 2010.12
15. 2006.07

2015 10

2014-2015

26.8% 1 1.2 27.8% " 085 SCI

3

2015 6 19 20
79 42
174 13 19
67 8
2015 6 20 4
9 7 2012
42 18 40% 5
463 33 1525 20
30.36% 1.79
104 32 131 163
2580 29
642.8 9244 688

"985" "211"
2015 14059 2260 3879
188 3121 449
4.50:1 4.42:1
2015 273

	367	67	3879	16.5%
		12181	1145	
1682		104	9285	4174
15		40	1577	42
		2227	2123	4.90%
	2500	2014		1200
	1000			400
		24		
		64		785

TED “ ”
 2014-2015 “ ”312
 TED “ ”
 2014
 •1925 “ ”
 “ ”
 “ ”
 “ ”

	2014-2015	218	20	
		71	3	32.57%
4		2902	32	28.57%
2342		60	80.70%	81.87%
	2014 9	2014	97.89%	2013
	96.32%			

2014

14.89% 1.25%

16.42% 0.74%

2

18

4

2

354

26

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4.

57 2014

23.9% 78 2014

39.28% 1752 2014 26%

2014 622

2014 9.3% 3896 2014 7%

17

5.

2014 10

2013-2014

2014

1.

2015 14059 225

19.12% 741

2014 301 68.4% 985 13 2013

2 550% 211 427 2013 389 9.8%

2.

SCI 10

2014 13 2

3.

		2015	78		
		30	37		
4	2014	56	39.28%	2015	8
		276	2014	273	3

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“211 ”

“211 ”

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	79	
	42	
	174	
	13	19

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11.03-		080201	59	00.12-	
11.03-		080202	60	98.06-	
06.01-		080203	61	90.11-	
03.09-		080204	62	03.09-	
11.03-		080804	63	03.09-	
11.03-		081100		11.03-	
11.03-		081101	64	90.11-	
11.03-		081102	65	11.03-	
06.01-		081103	66	11.03-	
11.08-		081104	67	11.03-	
11.03-		081105	68	11.03-	
11.03-		080300		11.03-	
11.03-		080301	69	11.03-	
11.03-		080302	70	06.01-	
11.03-					
06.01-		081402	71	06.01-	
11.08-					
11.03-		120100		06.01-	
06.01-		120101	72	06.01-	
06.01-		130400		11.08-	
85.12-T		130401	73	06.01-	
06.01-		130500		11.08-	
06.01-		130501	74	11.03-	
90.11-		130100		11.08-	
11.03-		130101	75	11.03-	
11.03-		130300		11.08-	
11.03-		130301	76	11.03-	
11.03-		130302	77	06.01-	
11.03-		130303	78	11.03-	
06.01-					
11.03-		030505	79	06.01-	
11.03-					
84.01-					

2-3

2015 5

11.03-		071100		11.03-	
03.09-		071101	100	11.03-	
11.03-		071102	101	00.12-	
11.03-		071300		11.08-	
11.03-		071301	102	11.08-	
11.03-		071400		11.08-	
11.03-		071401	103	11.08-	
11.03-					

020101	9	06.01-		080103	106	84.01-	
020102	10	11.03-		080104	107	00.12-	
020103	11	11.03-		080200		03.09-	
020104	12	11.03-		080201	108	81.11-	
020105	13	03.09-		080202	109	93.12-	
020106	14						

050206	57	11.03-		082700		11.03-	
050207	58	11.03-		082701	149	11.03-	
050208	59	11.03-		082702	150	11.03-	
050209	60	11.03-		082703	151	06.01-	
050210	61	11.03-		082704	152	11.03-	
050211	62	99.12-		083000		06.01-	
050300		06.01-		083001	153	03.09-	
050301	63	03.09-		083002	154	93.12-	
050302	64	00.12-		083100		06.01-	
060200		11.08-		083100	155	86.07-	
060201	65	06.01-		083201	156	00.12-	
060202	66	06.01-		083500		11.08-	
060203	67	06.01-		083500	157	11.08-	
060204	68	98.06-		120100		06.01-	
060205	69	03.09-		120100	158	90.11-	
060206	70	03.09-		120200		06.01-	
060300		11.08-		120201	159	96.06-	
060300	71	06.01-		120202	160	03.09-	
070100		06.01-		120203	161	03.09-	
070101	72	03.09-		120204	162	06.01-	
070102	73	81.11-		120401	163	03.09-	
070104	74	86.07-		120500		06.01-	
070105	75	86.07-		120501	164	06.01-	
070200		06.01-		120502	165	99.12-	
070201	76	06.01-		120503	166	03.09-	
070202	77	06.01-		130100		11.08-	
070203	78	06.01-		130101	167	03.09-	
070204	79	06.01-		130200		11.08-	
070205	80	84.01-		130201	168	06.01-	
070206	81	06.01-		130202	169	06.01-	
070207	82	90.11-		130300		11.08-	
070208	83	84.01-		130301	170	06.01-	
070300		06.01-		130302	171	00.12-	
070301	84	03.09-		130303	172	99.12-	
070302	85	03.09-		130400		11.08-	
070303	86	81.11-		130401	173	96.06-	
070304	87	86.07-		130500		11.08-	
070305							

2-6 2014

2-6 2014

	4812	5245	37		3	248	7
	3747	4990	2		1	205	5
	1065	255	35		2	43	2

2014

2014 9

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2-7 2014

2-7

1		5.52	/
2		2.23	/
3		21.29	/
4		53.36	/

2014

2014 9

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9 244

5 213.371

688

642.8

354

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		10000 5000	2	2
4			492	602.4

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2-9

2-9

		/		
SANDVIK		15000 10000	4	4.5
		8000	3	2.4
SSAB		5000 4 1	5	2.5
		3000 1500 1000	11	1.5
		2000	5	1
		1500 1000	13	1.45
		6000 3000	5	2.1
		500—1000	10	1
		800 500	13	0.8
		1000	5	0.5
		5000 3000 1000	8	1.6
		3000 2000 1000	9	1.5
		2000 1000	9	1
		3000 2000	11	2.4
		10000 6000	12	3
		1500 3000	13	2.1
		3000 2000	10	2.2
		2000 1000 500 250	30	2.4
		3000 1000	2	0.4
		2000	2	0.4
		2000	5	1
17			185	35.75

3

2-10

		/		
“ ”		7000	5	3.5
		1500	1	0.15
		2000	5	1
3			11	4.65

4

2-11

		/		
		1500-1900	685	1113.44625
		237.5-500	8559	4099.92475
		300-480	3208	102.8879
		300-500	713	30
5			13165	5346.2589

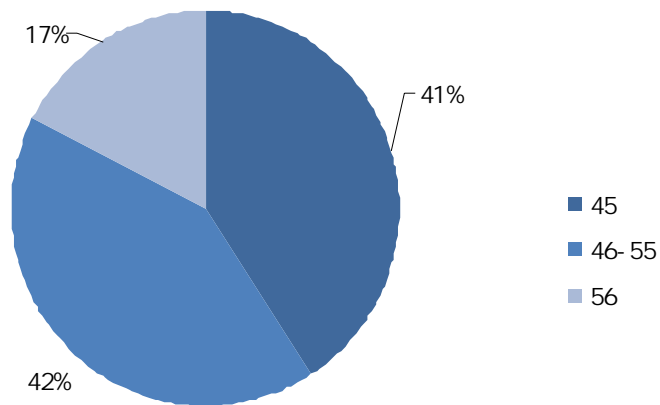
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1

2014 12

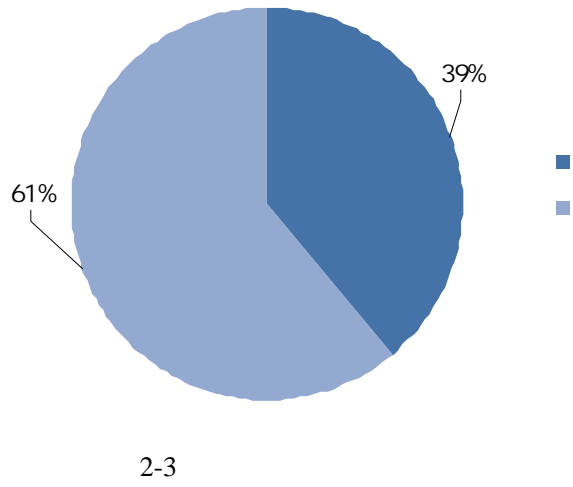
1525

2-2



2-2

2



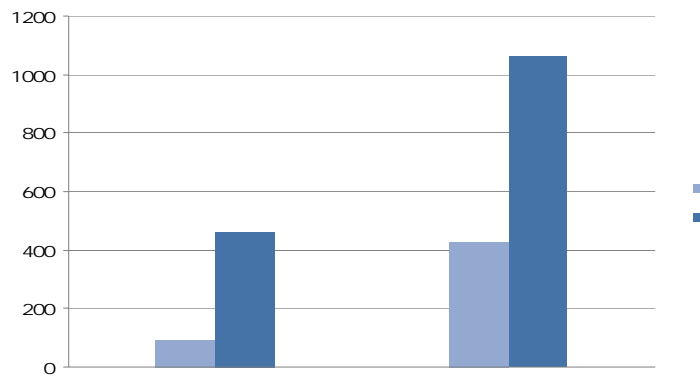
3

2014

463

30.36%

2-4



2-4

2.

2-12

	463	1682	3.63
	1062	9285	8.74
	1525	10967	7.19

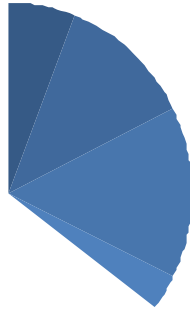
3.

2014

“ ”

34

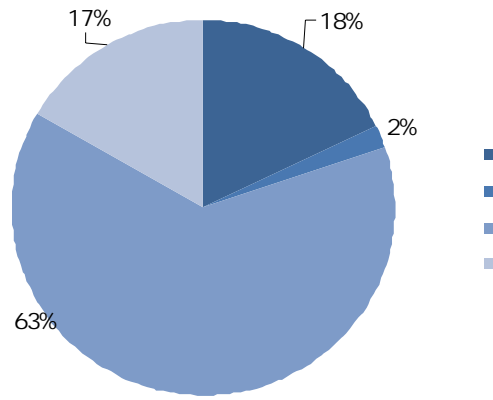
2-5



”
2 57 288.7 39 476
3 067 2014 9

2.

32 104) 29 163 131 (2580



2-6

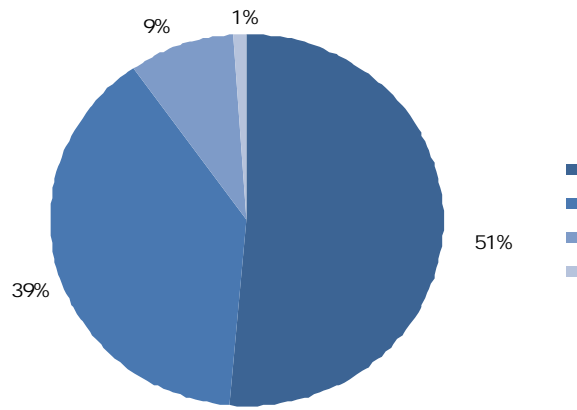
3.

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2014

212,367.64

2-8



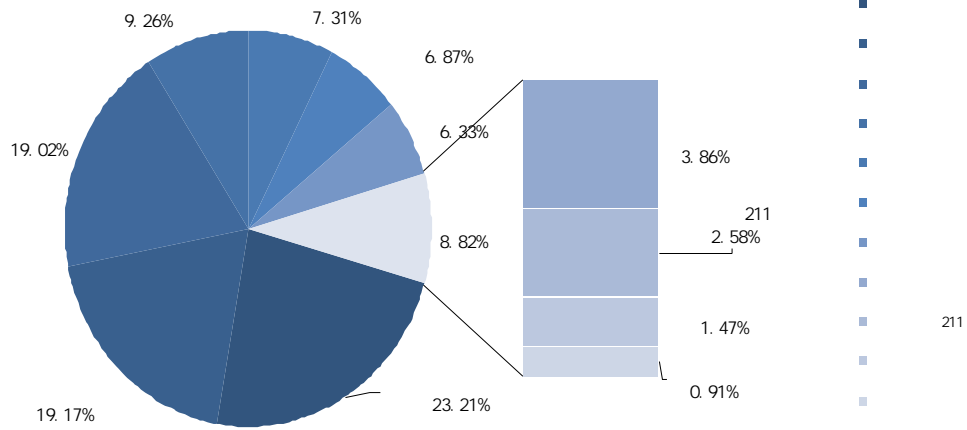
2-8

2.

2014

246,991.08

2-9



2-9

2014

1.

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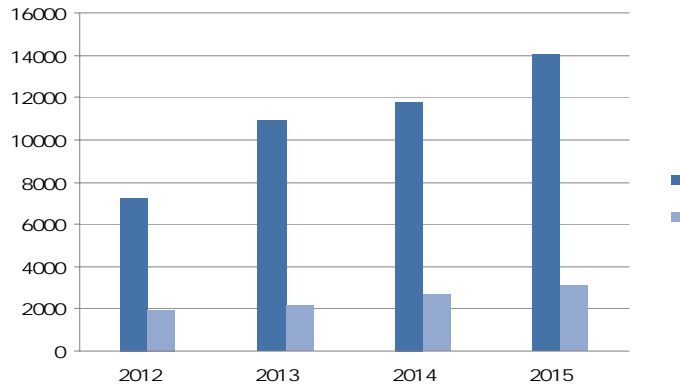
14059

3879

3121

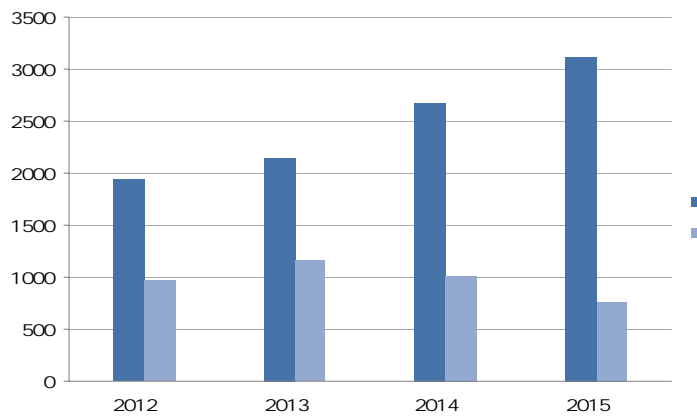
4.50 1

3-1



3-1

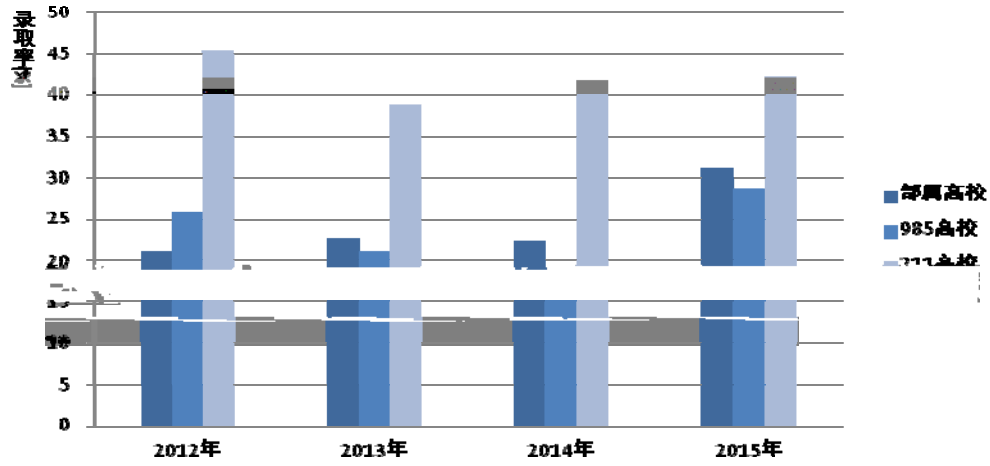
3-2



3-2

2.

3-3

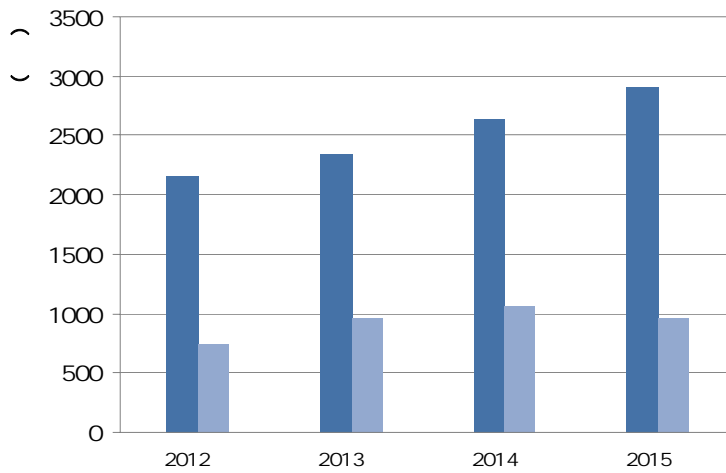


3-3

3.

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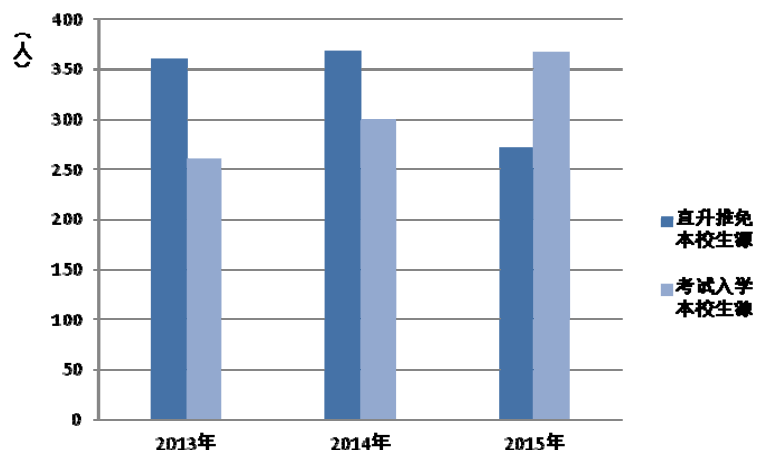
3-4



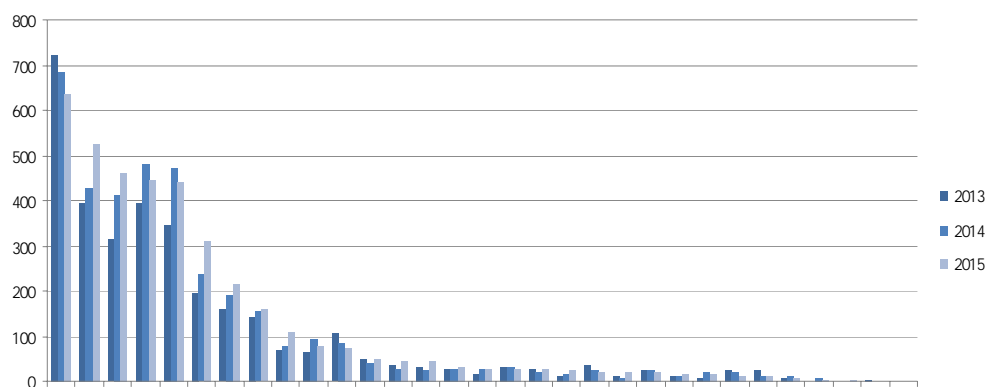
3-4

2015	273	
367	3879	16.5%

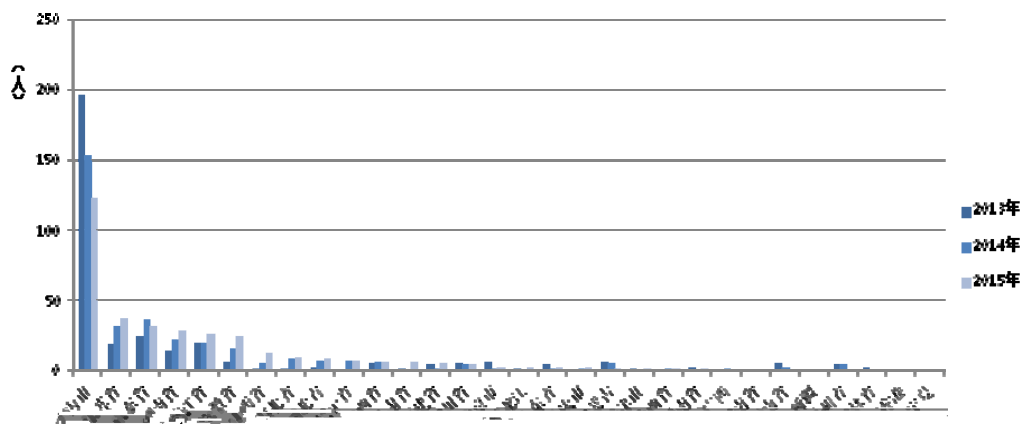
3-5



3-5



3-6



3-7

4-1

4-1

		2	3	1-2	1
		4	5	2-4	5
		4-8	8-12	24	$\geq 12+5$ ²
		X ¹	24	≥ 9	≥ 20
		5	2	5	3
		$\geq 15-19$	≥ 42	≥ 41	≥ 46

1

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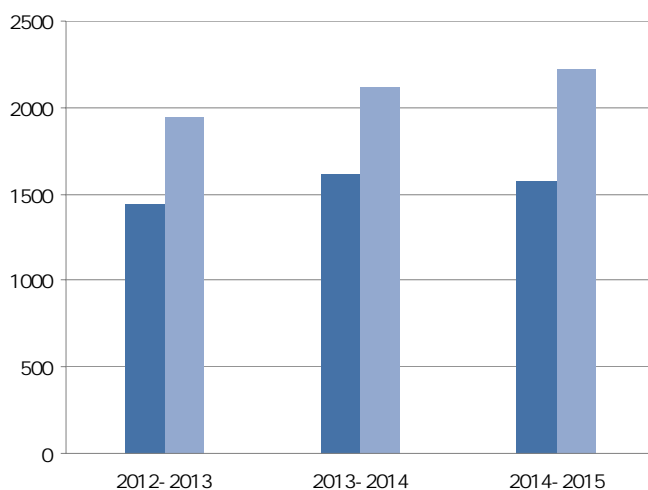
5

“ ”

2013-2014

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2014-2015
2227
1577
4-1



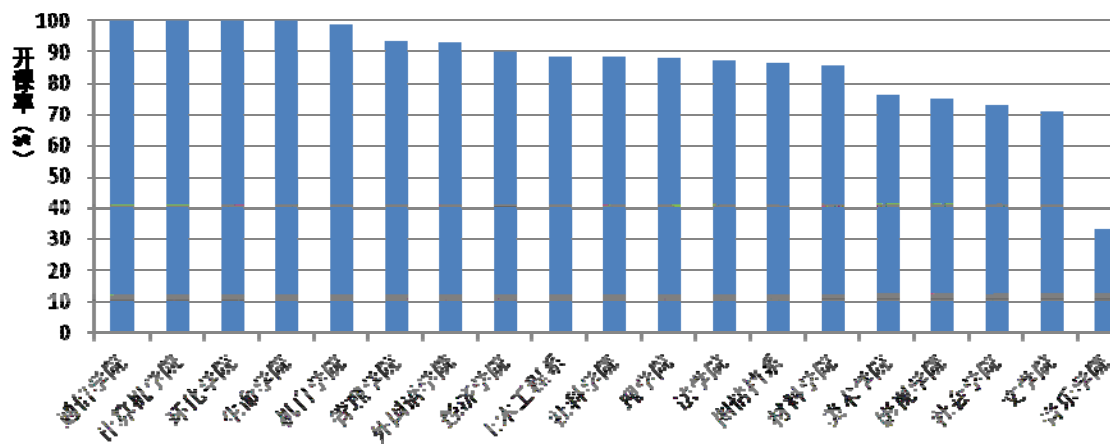
4-1

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24
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1:3
1:2

2014

2014-2015
4-2



4-2

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	2015		1200		2500	
	58000		1,547,600			1
		30	90		9	10%
56	62.22%		25	27.78%		

2.

2015	23		6
		13	6

2015

4-2

4-2

2013-2014		101	13
2014-2015	199	101	19 13
		98	6

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4-3

4-3

2014		10	
2015		5	
2015		1	
2015		1	
2014	2014	1	

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30	163	400	1

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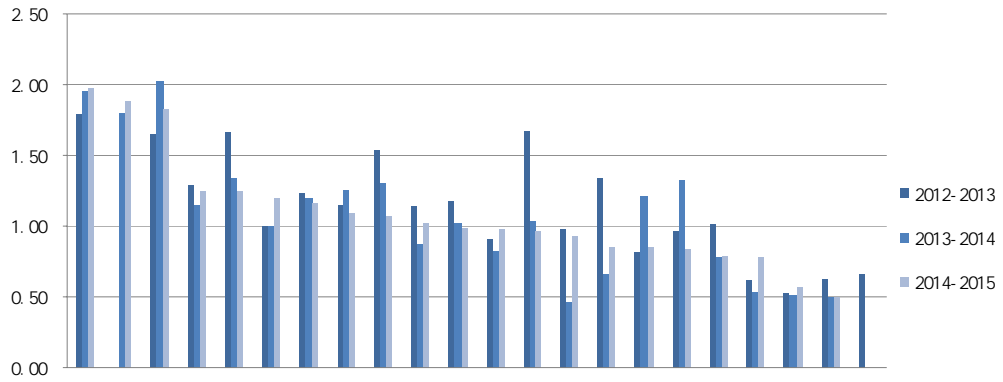
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1.

1

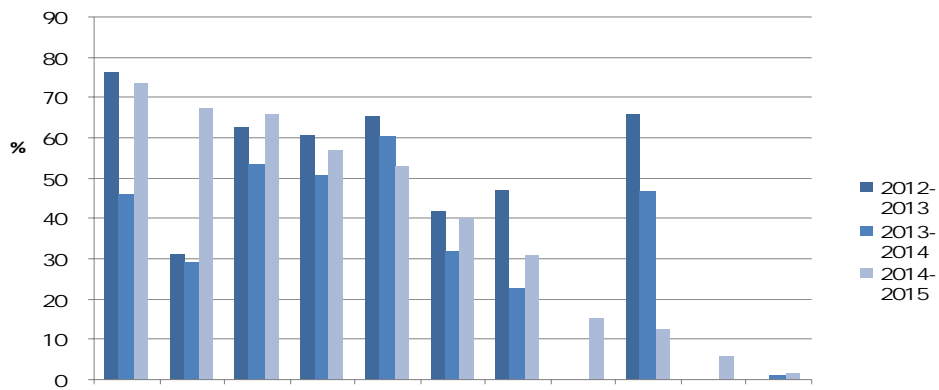
4-3 4-4



4-3

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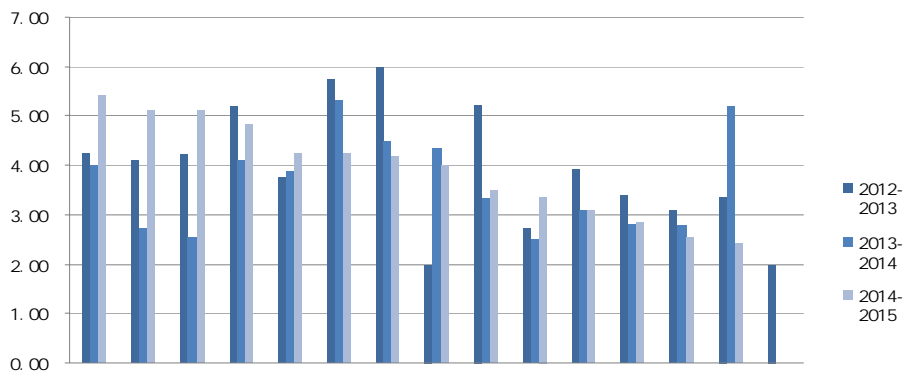
4-4

SCI EI ISTP

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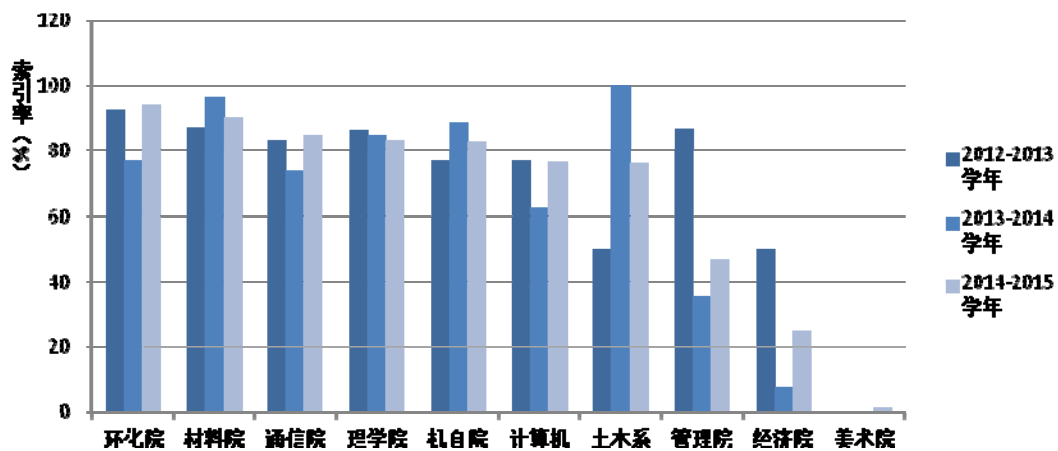
4-5 4-6



4-5

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4-6

SCI EI ISTP

CSSCI

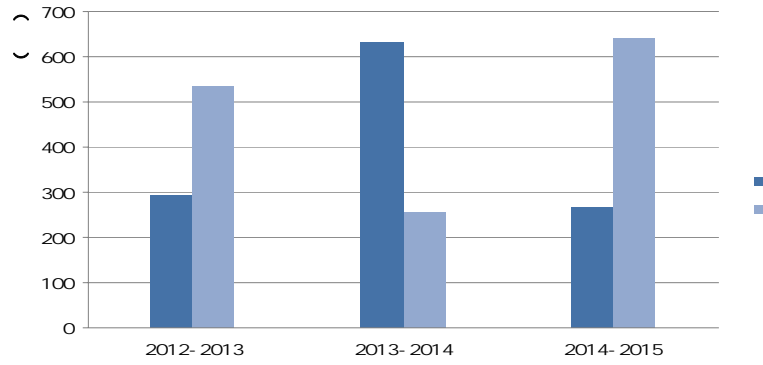
2.

2014-2015

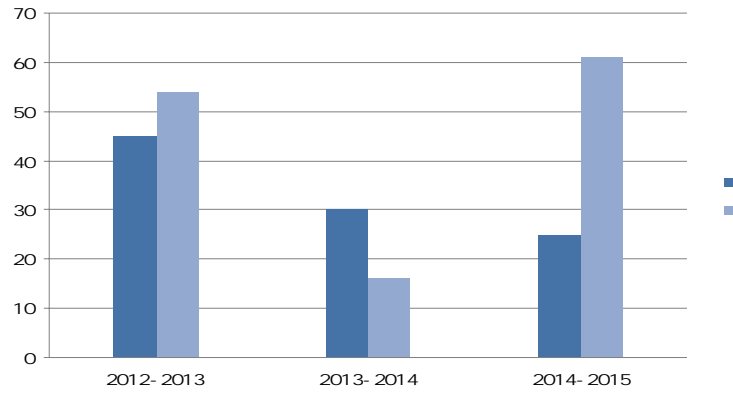
265

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4-7 4-8



4-7



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2014

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Journal of Materials Research
Characterization Materials Letters
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EBSD



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TED

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 150 2015 1 19 8
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5			--	5
6			--	17
7				6
8		“ +”		3
9			—	11
10				21

11				23
12		“ ”		10
13		—		3
14				25
15		----		3
16		“ ” —		4
17		“ ” —		5
18				

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2. “ ” ----

2014 9 “ ”

2014 9 4

Treg

2014

T (Treg)

FOXP3+Treg

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2014 9 26

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Johan Liu

Andrew Y C Nee

Uday

B Pal

Matthew M F Yuen

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“ ”

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“ ”

2015 10

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24

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15000

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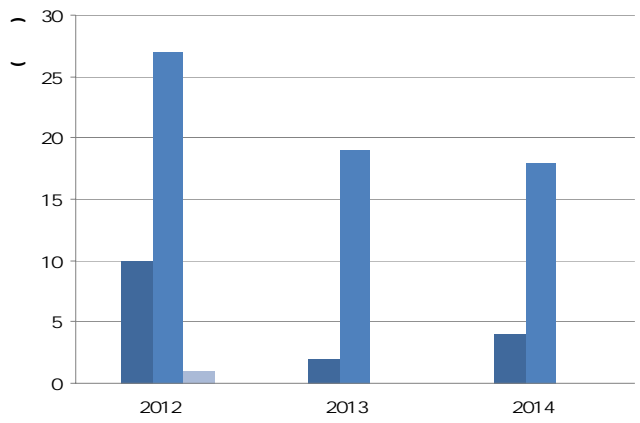
“ ”

2014

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18

6-1

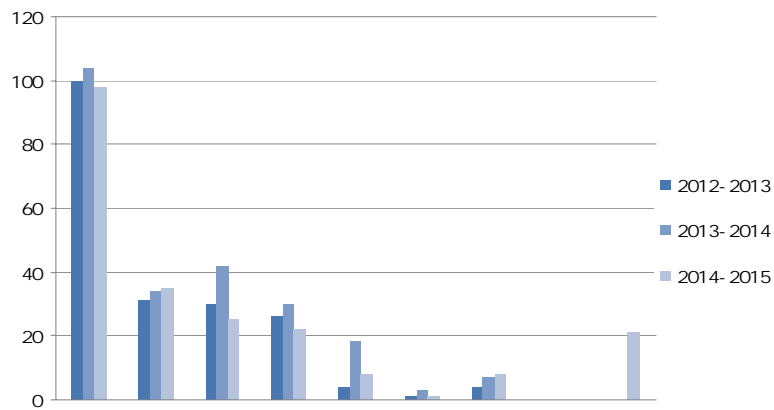


6-1

1.

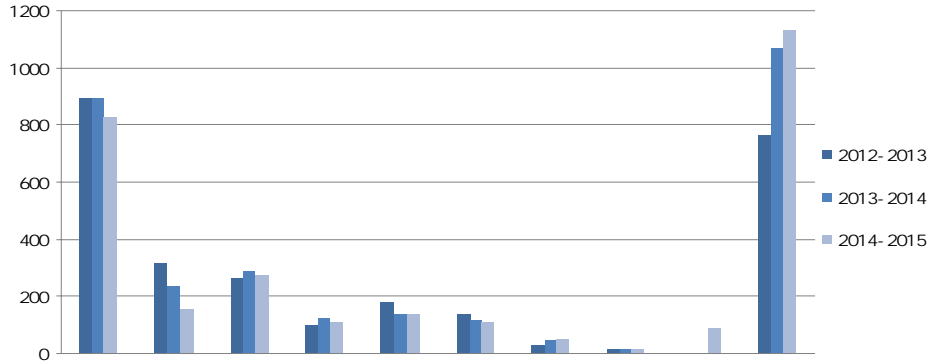
6-2

6-3



6-2

2014-2015



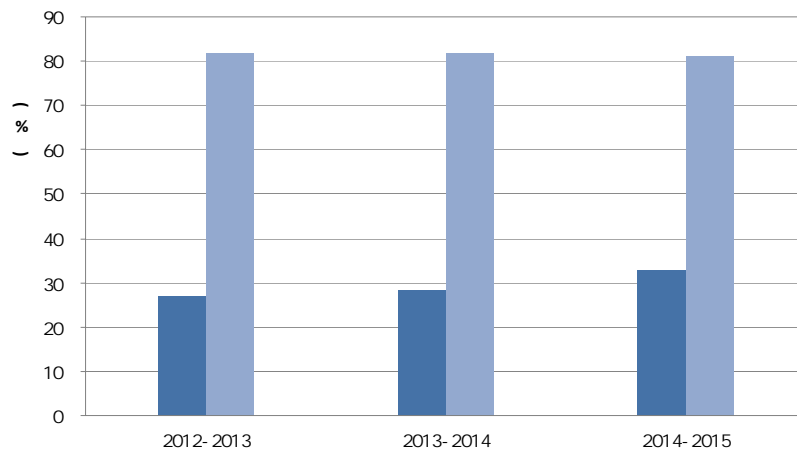
6-3

2014-2015

2.

2014-2015	218
71	32.57%
2342	80.70%
	2902

6-4

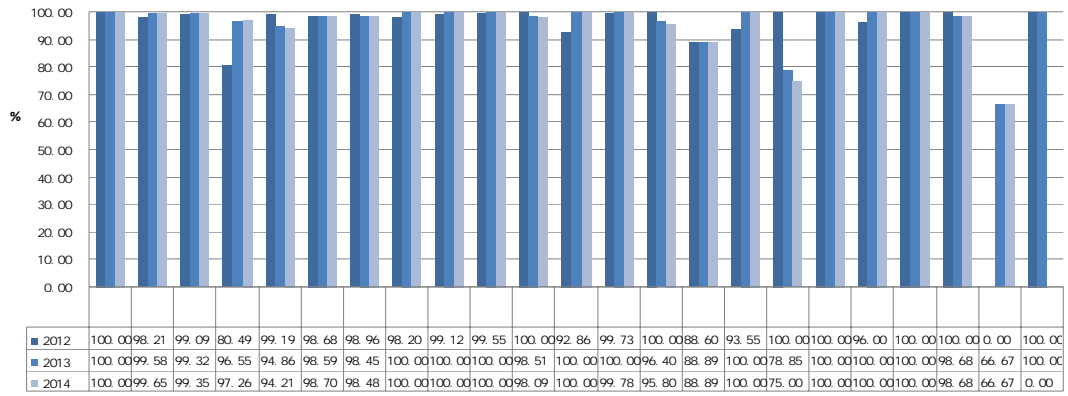


6-4

1. 2011-2013

2014	9	2014	97.89%	2013
			96.32%	

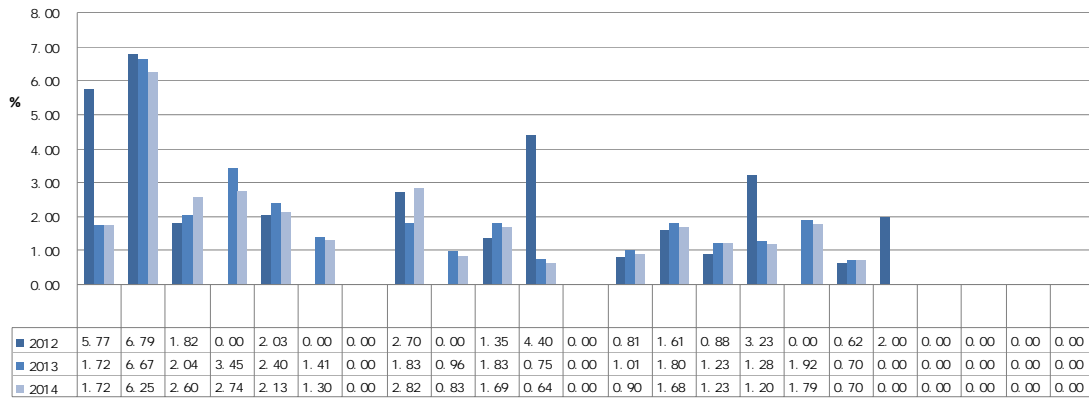
6-5



6-5

2.

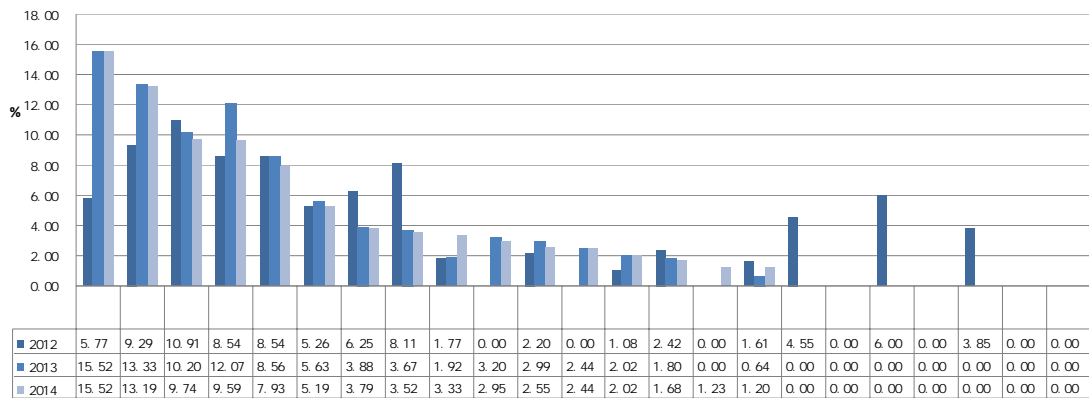
6-6



6-6

3.

6-7



6-7

2013
2013

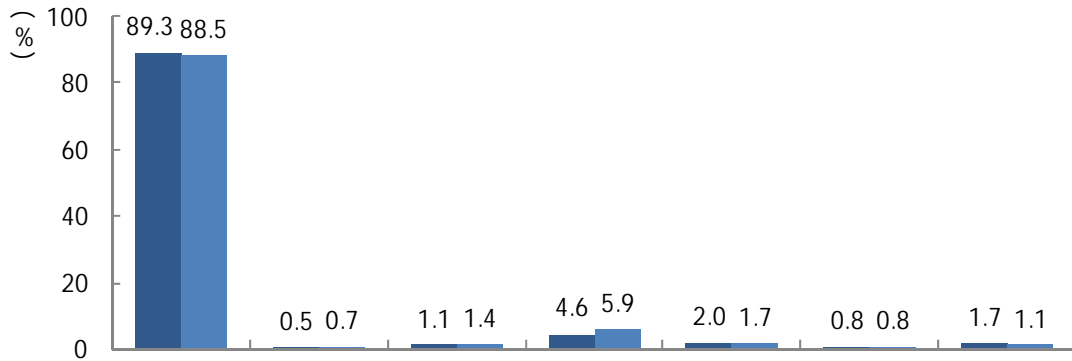
1.

32
20 31

1

2013 “ ” 88.5% 2012 89.3%
“ ” 5.9% 2012 4.6% 1.3

■ 2012 ■ 2013

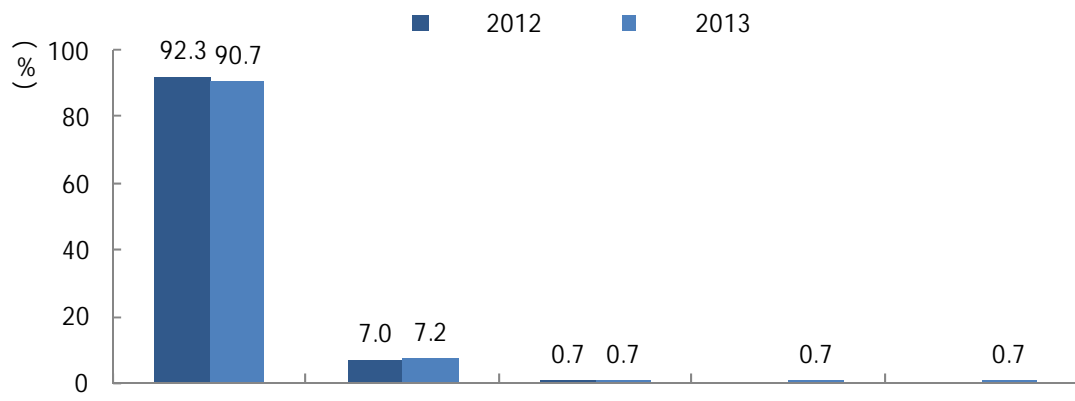


6-8 2013

100%

2

2013 “ ” 90.7% 2012
92.3% 1.6 “ ” 7.2% 2012
7.0%



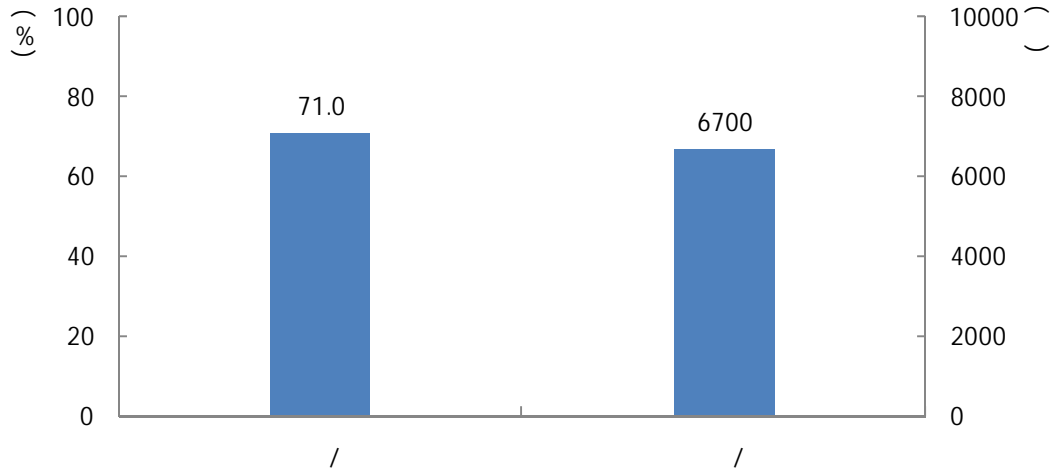
6-9 2013

100%

2.

1

2013 “ ” “ / ”
 10.0% 9.2% 8567 8266
 6-1 2013 8

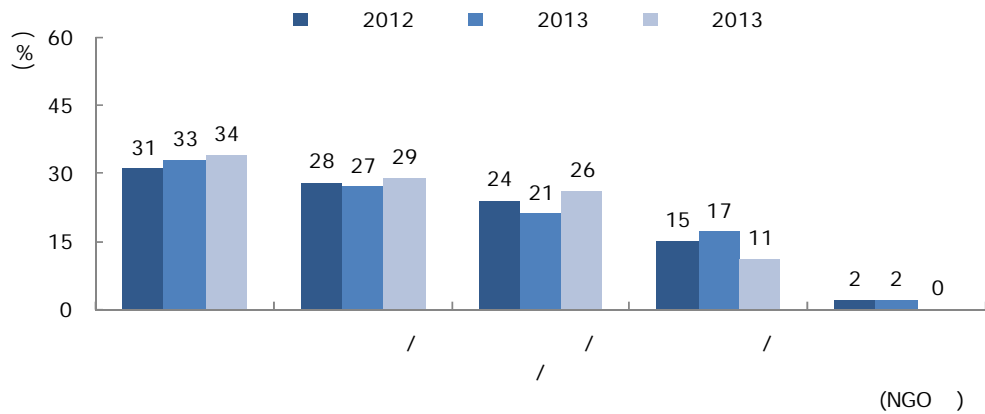


6-10 2013 /

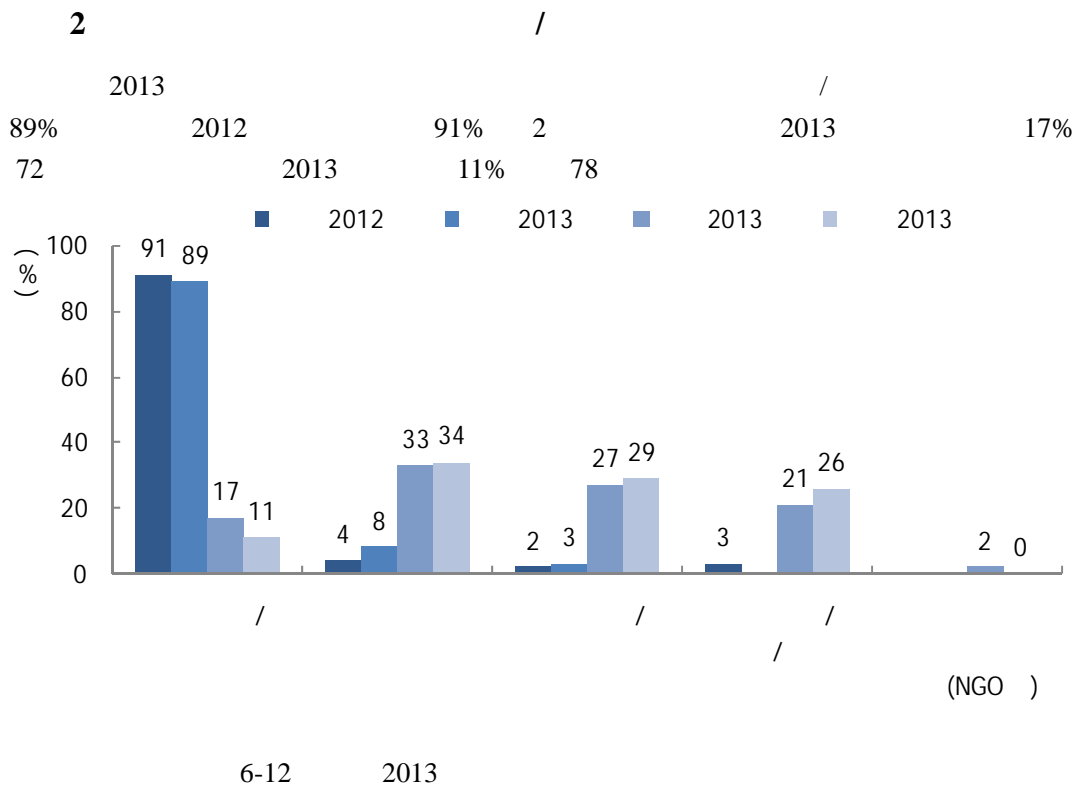
3. 1

1

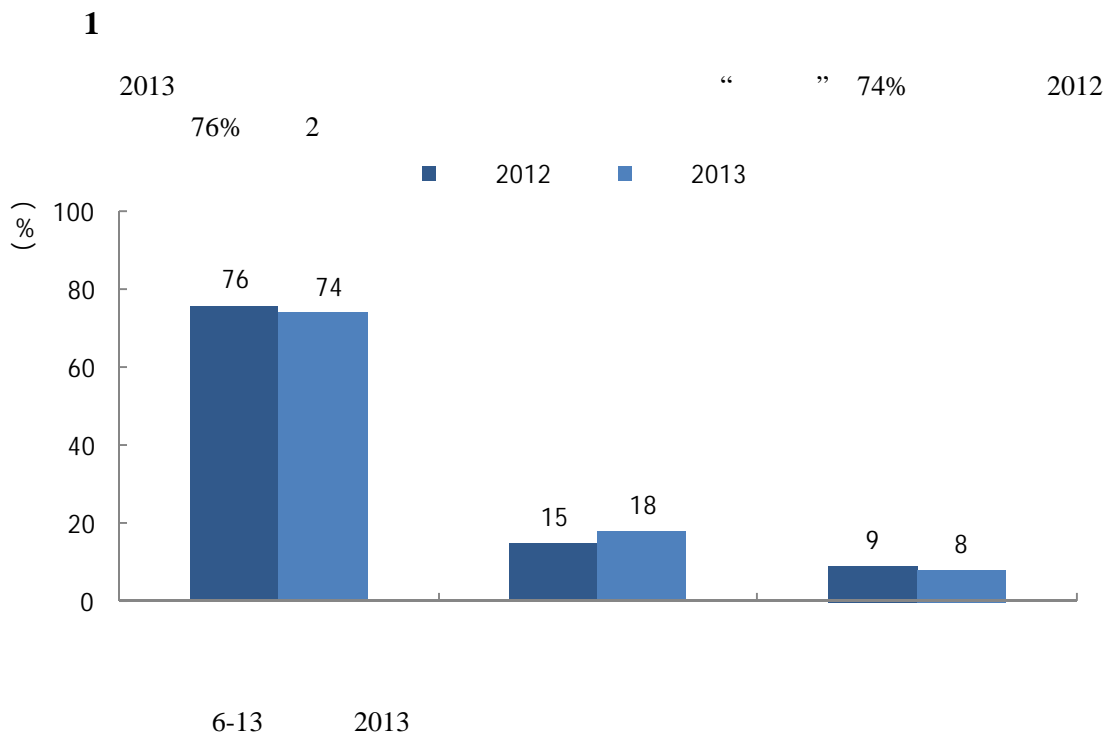
2013 6673 / / 33% 21% 8100

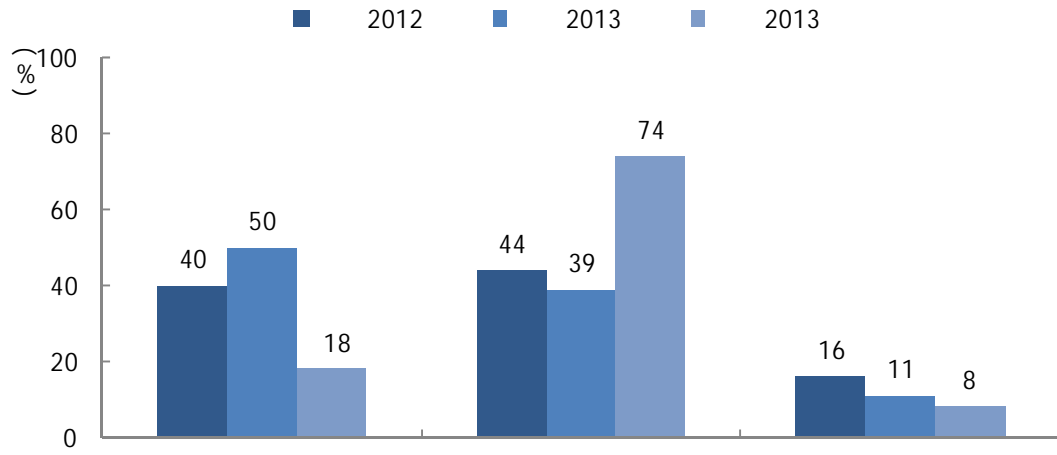


6-11 2013



4.





6-14 2013

2

1.

3

1

2013
197

2013

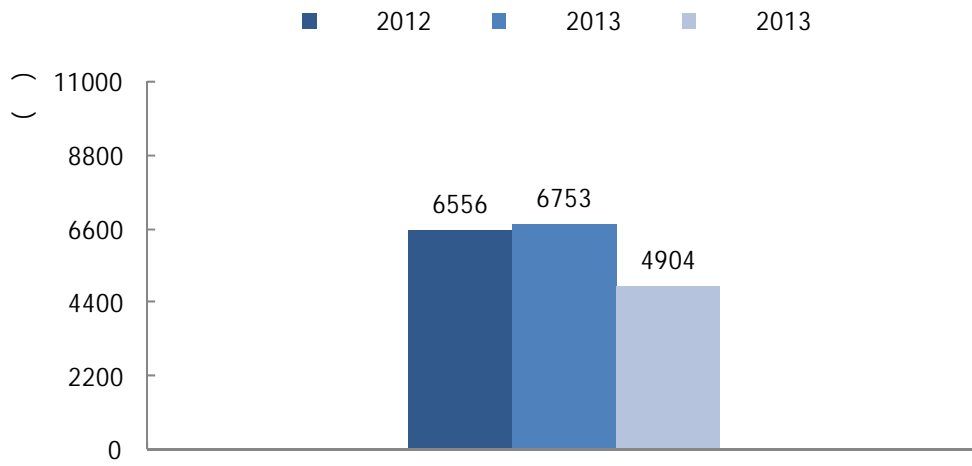
6753
4904

2012
1849

6556

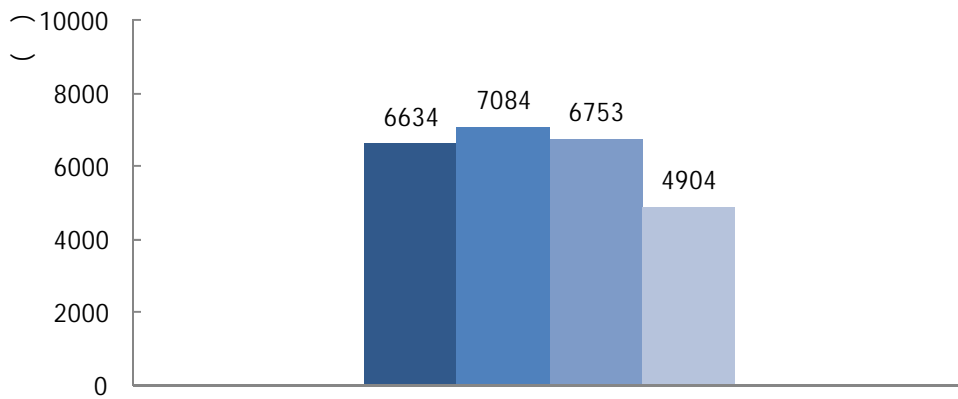
2

3



6-15 2013

2

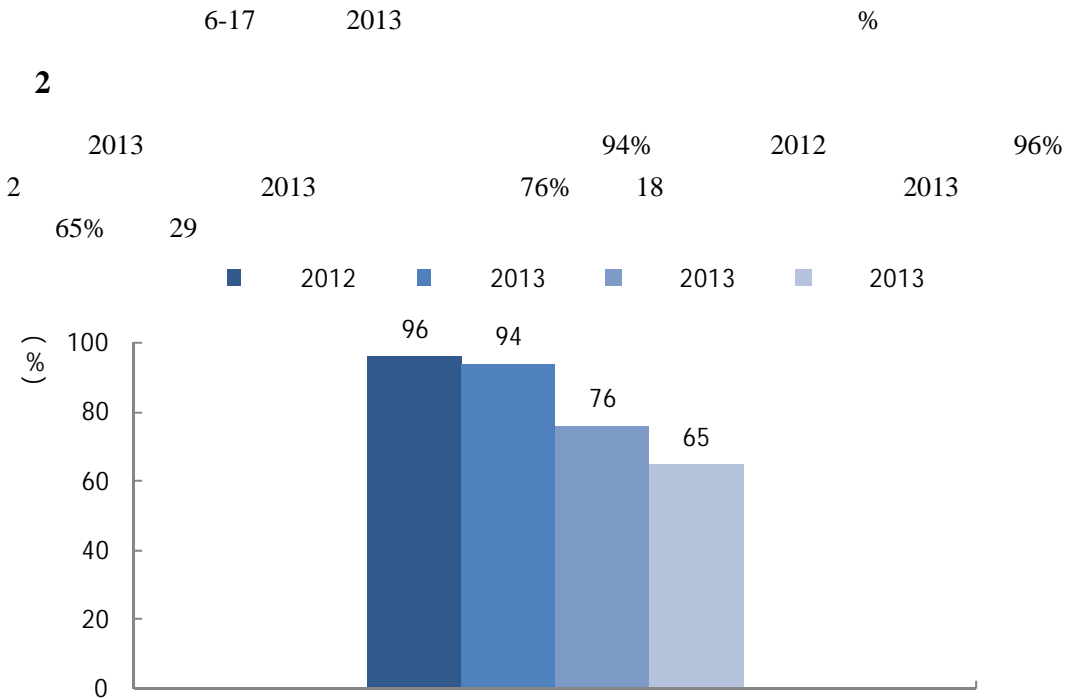
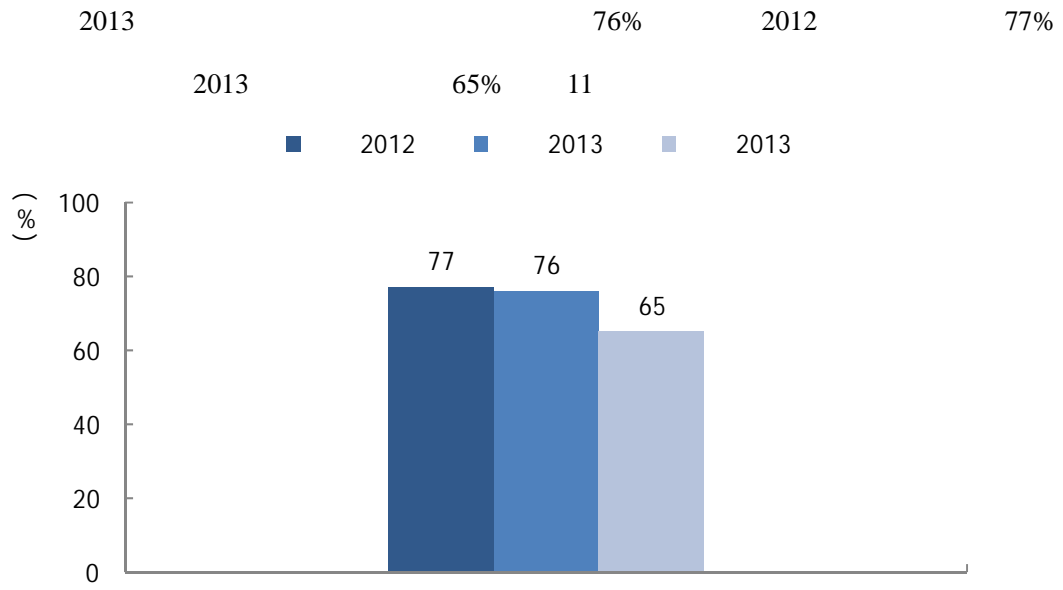


6-16 2013

2.

4

1



6-18 2013 %

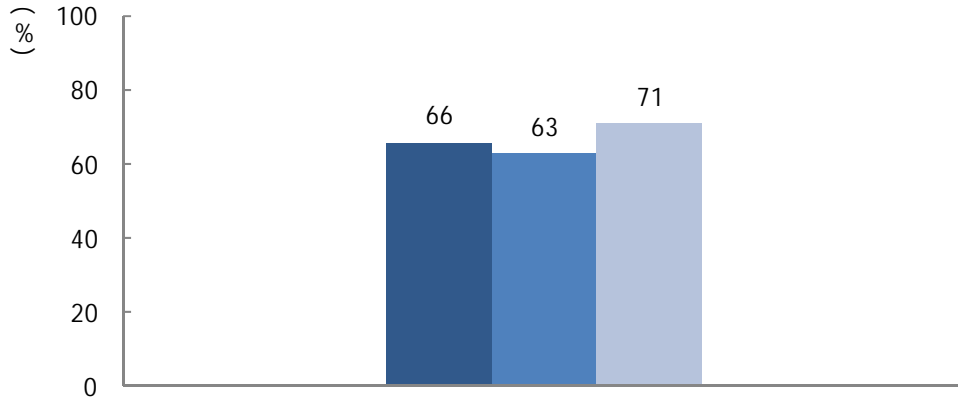
3. 5

5 " " " " "

2013

1

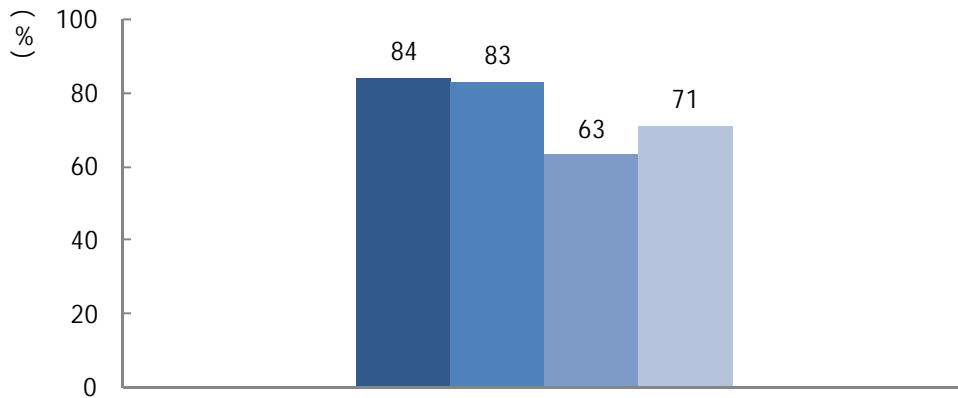
2013 63% 2012 66%
 3 2013 71% 8 2013



6-19 2013

2

2013 83% 2012 84%
 2013 63% 20 2013 71% 12 2013

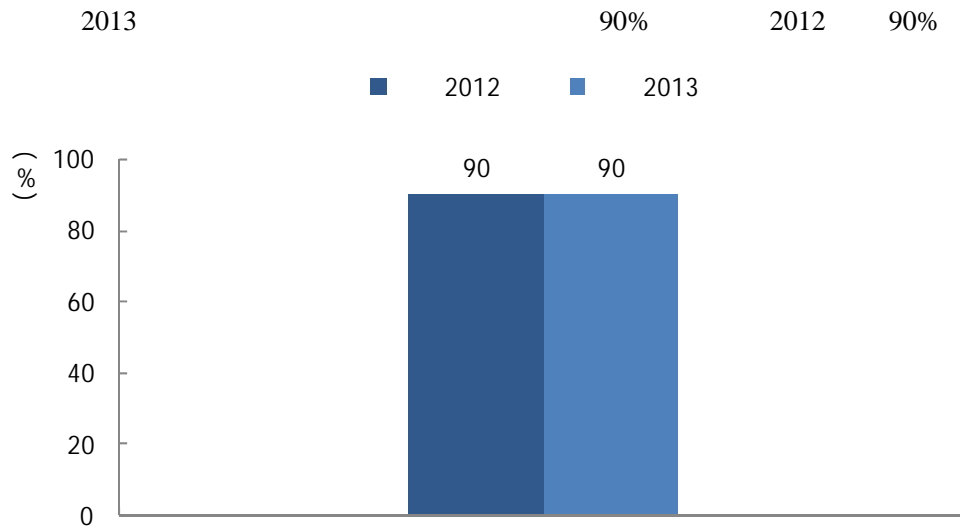


6-20 2013

6

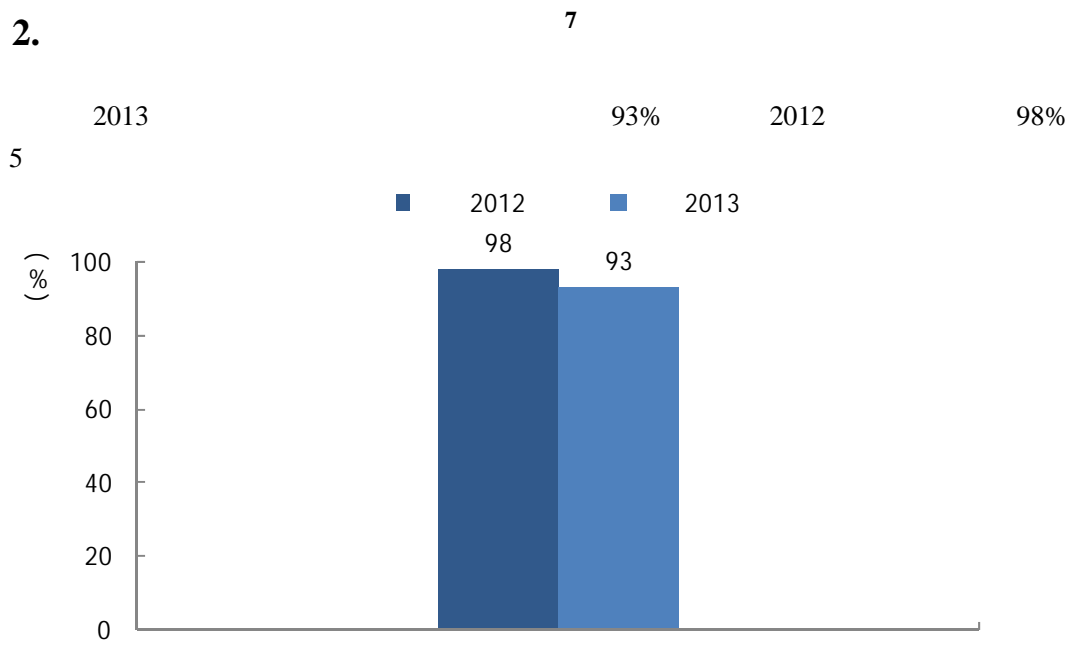
6 " " "
 " " " " " " " " " " " "

1.



6-21 2013

2.



6-22 2013



1.

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2.

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5

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3.

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4.

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“ ”

5.

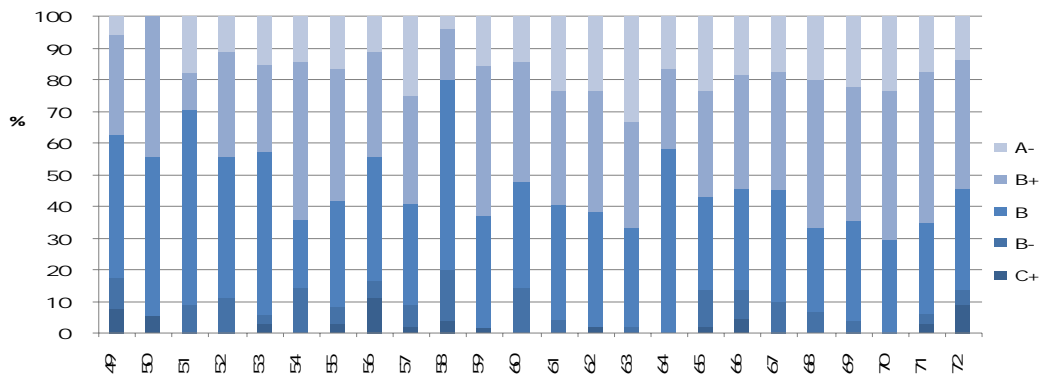
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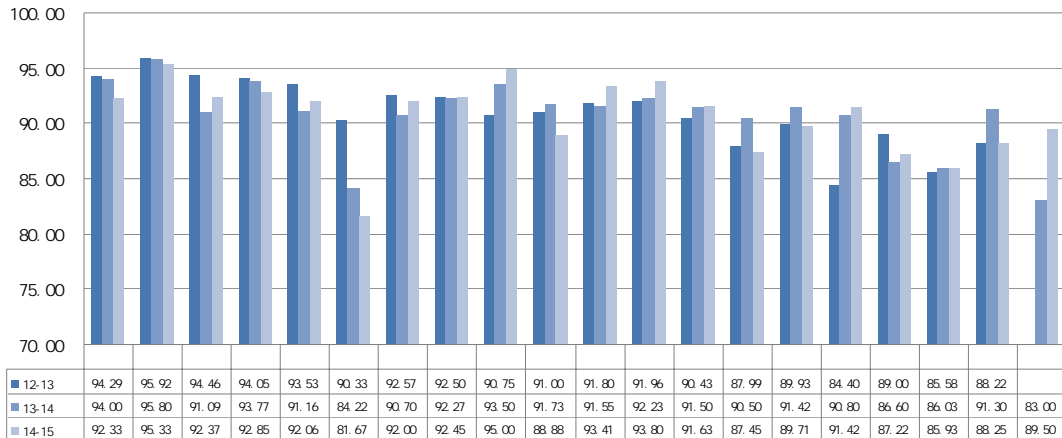
1.

7-1



7-1

2.



7-2

13-14

3.

1

7-1

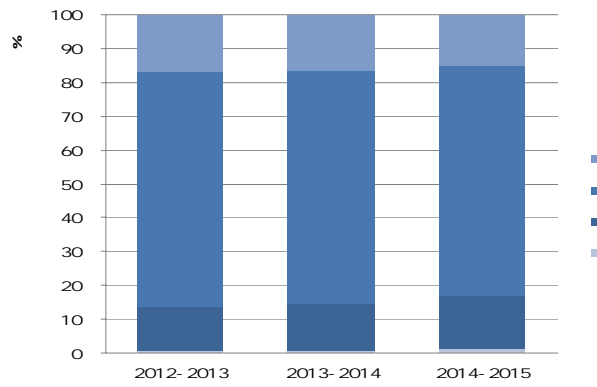
7-1

	2013-2014			2014-2015		
	2013-2013	2013-2014	2014-2015	2013-2013	2013-2014	2014-2015

	196	238	218	2712	2934	2902
973 863	17	9	1	80	78	82
	4	6	2	50	38	38
	2	7	3	30	16	13
	77	81	71	503	572	
	6	7	9	39	32	23

2

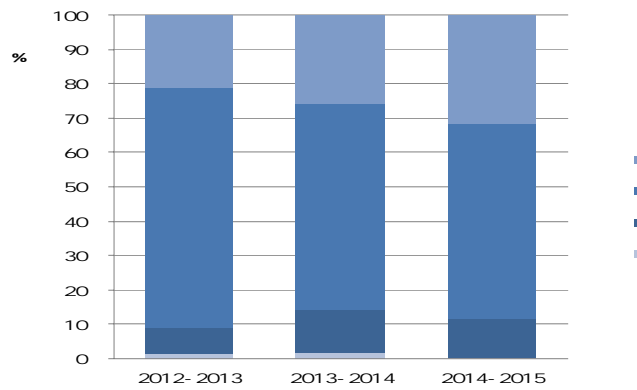
7-3



7-3

3

7-4

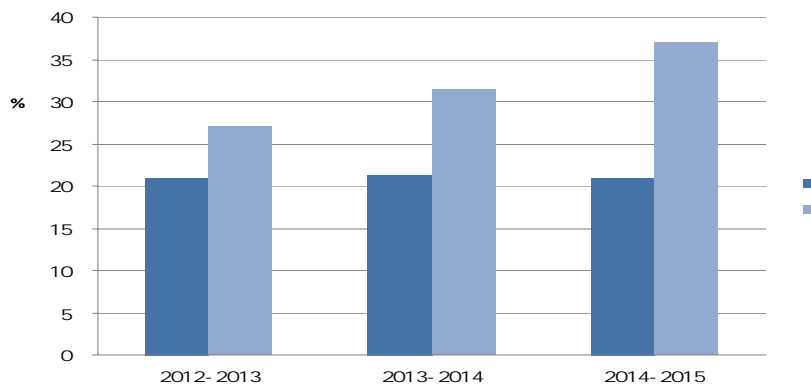


7-4

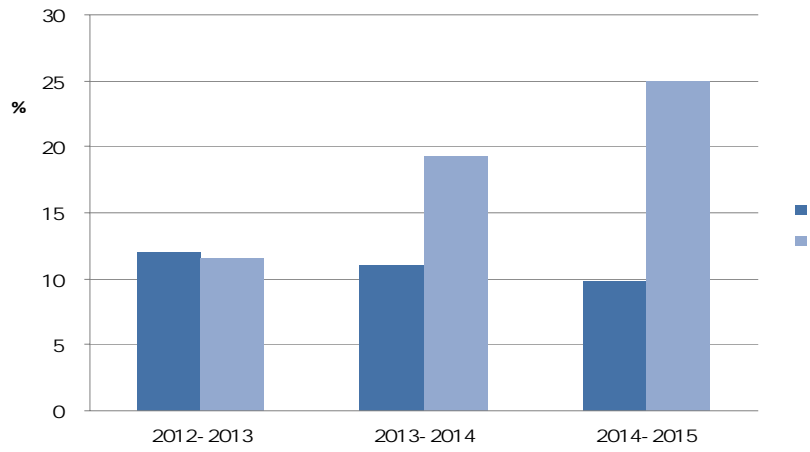
4

7-5

7-6

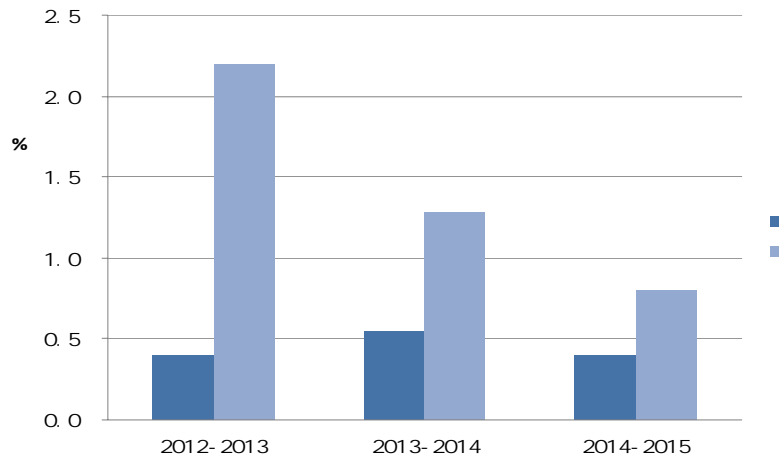


7-5

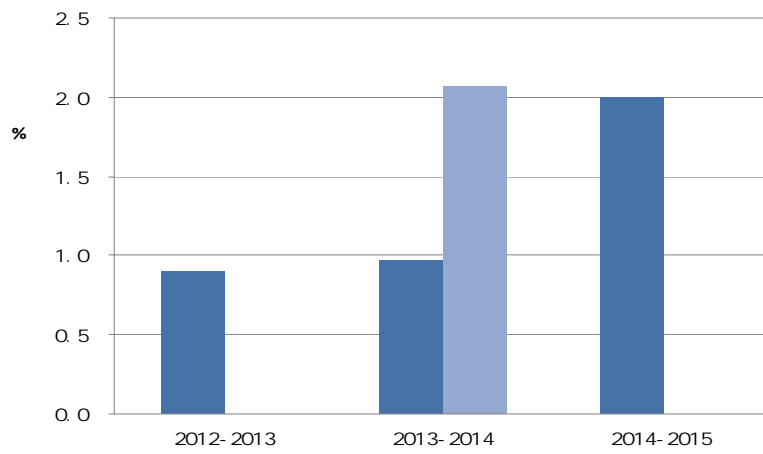


7-6

7-7 7-8



7-7



7-8

4.

1

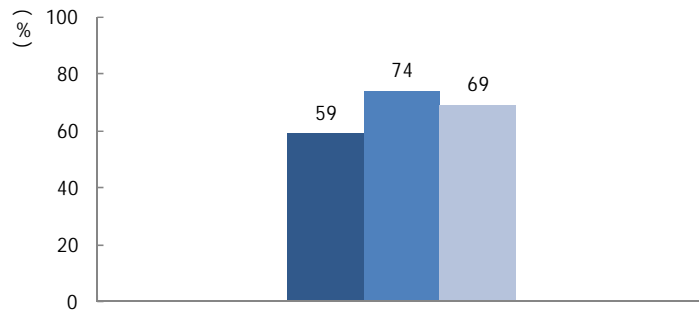
8

1)

2013 2012 2013

69% 5 74% 15 59%

2012 2013 2013



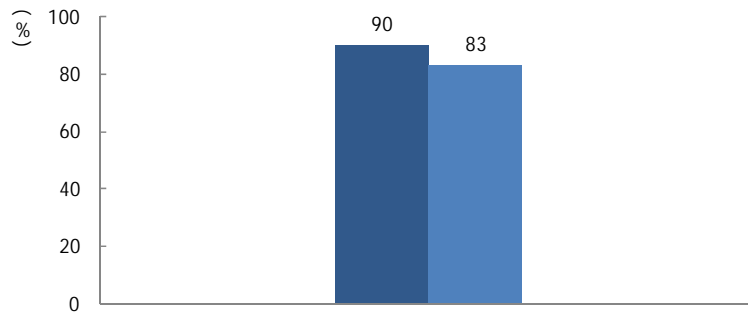
7-9 2013

2)

2013 2012

83% 90% 7

2012 2013



7-10 2013

8

" " " " " " 2013

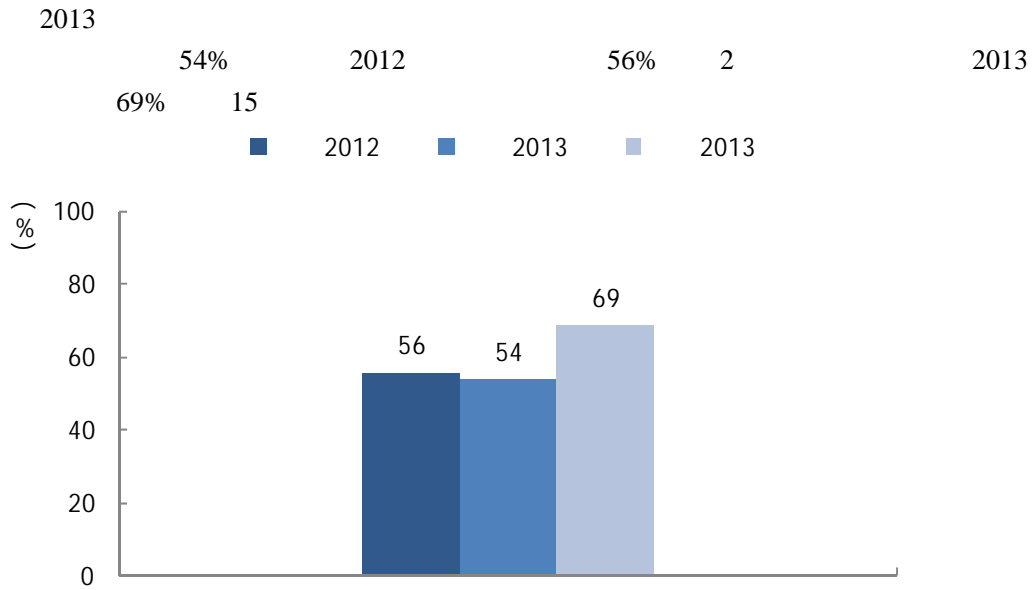
" " " " " " " " " "

" " " " " " "

2

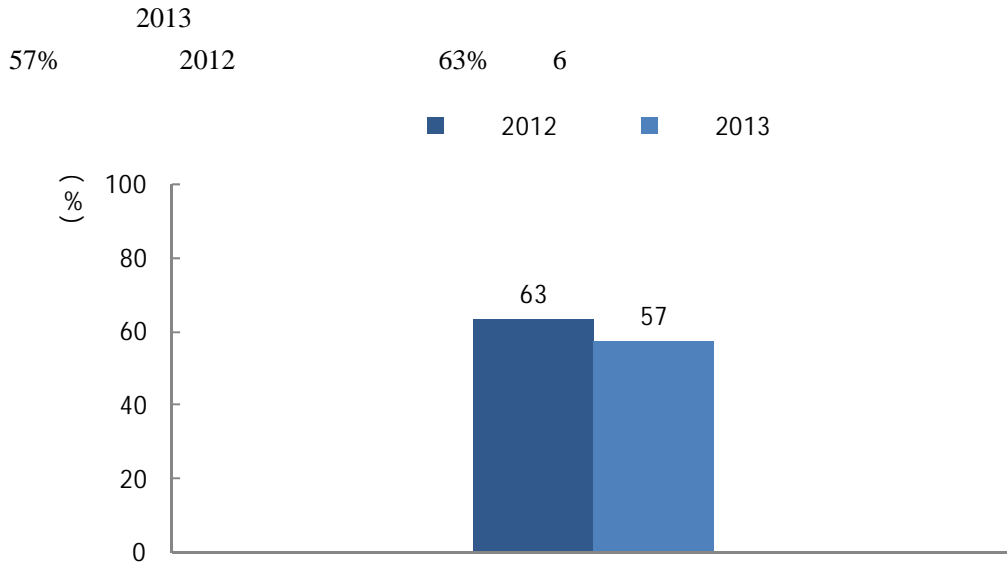
9

1)



7-11 2013

2)



7-12 2013

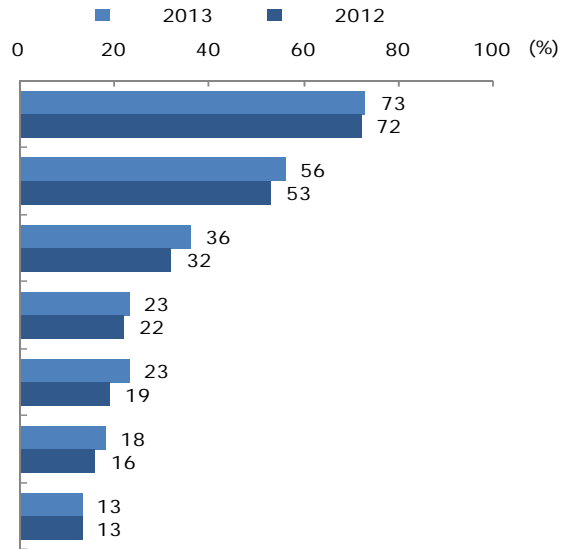
9 " " " "

" " " "

3

1

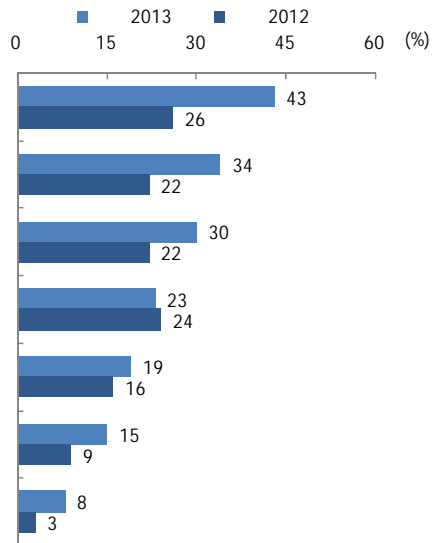
2013 “ ” 73% “ ” 56%



7-13 2013

2

2013 “ ” 43% “ ” 34% “ ” 30%



7-14 2013

1.

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2.

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3.

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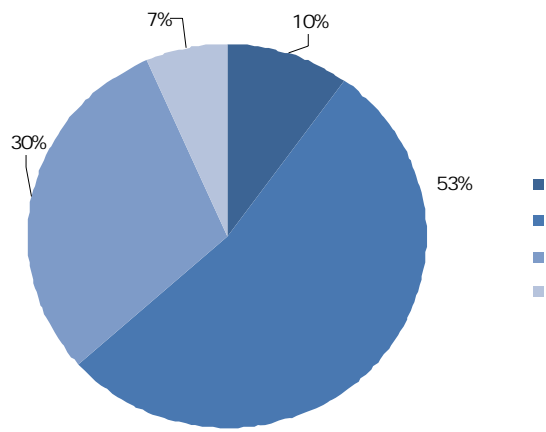
→

“ ”

“ ”

2015

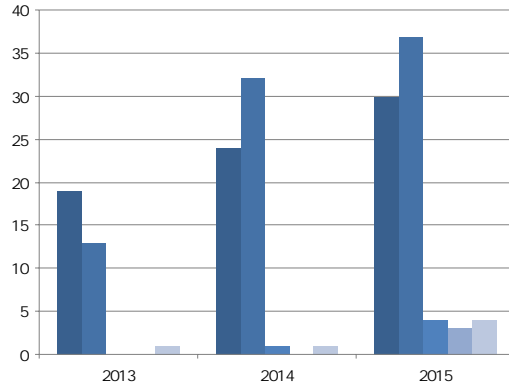
2014-2015 354
 78 37
 30 4
 4 2015 “ ”
 3 276
 8-1 2014



8-1

1.

2015 7
 336 157 161
 5 3 10
 8-2



8-2

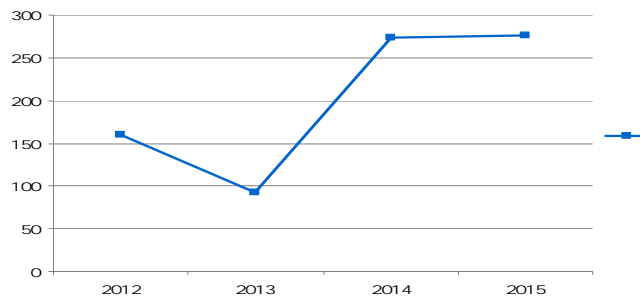
2.

2015 8 31

1100

30

8-3



8-3

3.

(1)

2014





(2)

2014

2014 8

Research) (Institute for Social
(Population

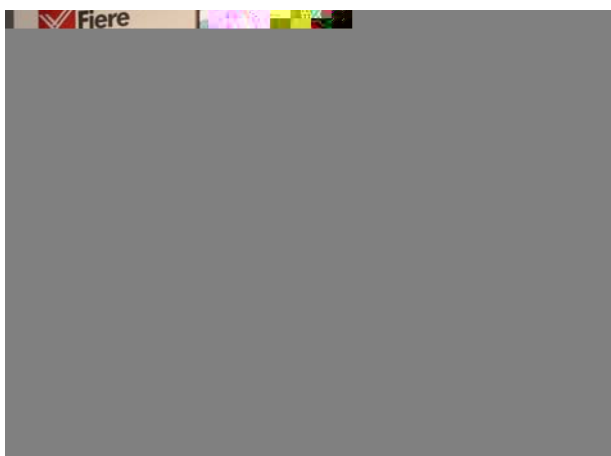
(4)

51

2015 3

51

“ ”



(5)

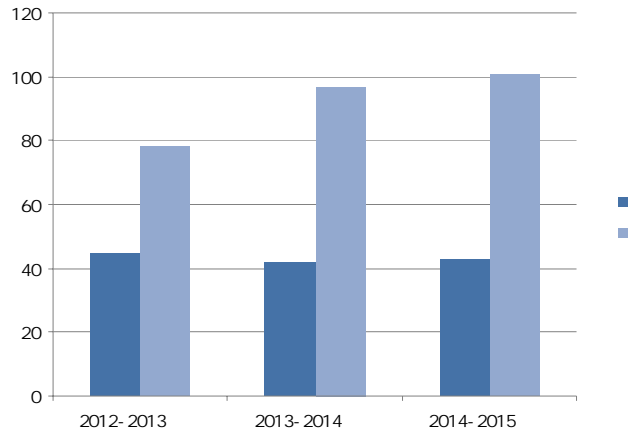
2014 9

2015 6

632

390

8-4



8-4

1.	“		”			
				741	2014	68.4%
2.	“		”			
2013-2014				SCIE	217	CSSCI
83	2012-2013			22.60%	16.90%	2014
	SCI	329	2013			7.4%
3.	“		”			
4.	“		”			
	2014					
5.	“		”			
	2014					

1.

2.

3.

4.

2014

160

30

5.

2015

1.

2.

3.

4.