

Table A  
Wave-by-wave sample sizes and exclusions: partnered women

	Wave						
	1	2	3	4	5	6	7
<b>Individuals</b>	13,969	13,041	12,728	12,408	12,759	12,905	12,789
<b>Households</b>	7,682	7,245	7,096	6,987	7,125	7,139	7,063
<b>Partnered women</b>	4,049	3,757	3,653	3,512	3,565	3,608	3,574
<b>Numbers of observations (of partnered women) with</b>							
<b>&lt; 25 or &gt; 59 years old</b>	956	907	907	910	941	970	1,010
<b>Partner</b>							
<b>&lt; 25 or &gt; 59 years old</b>	1,048	1,019	1,019	996	1,034	1,047	1,081
<b>Retired</b>	654	638	629	582	595	603	639
<b>Partner retired</b>	822	807	740	711	727	719	736
<b>Student</b>	61	81	61	56	60	58	66
<b>Partner student</b>	50	57	38	40	39	46	34
<b>Self-employed</b>	278	374	327	341	350	327	303
<b>Partner self-employed</b>	549	756	707	688	701	688	660
<b>Works in family business</b>	30	31	30	25	26	27	17
<b>Partner works in family business</b>	15	15	11	14	9	15	15
<b>Disabled</b>	105	101	89	100	99	94	85
<b>Partner disabled</b>	255	218	210	210	208	186	174
<b>Zero wage</b>	223	235	252	250	261	234	222
<b>Partner zero wage</b>	416	404	420	404	424	424	390
<b>Hours over 60</b>	12	10	7	9	12	11	6
<b>Total excluded</b>	2119	2119	2079	2058	2083	2074	2083
<b>Usable observations</b>	1930	1638	1574	1454	1482	1534	1491

Note that the total number of observations excluded is less than the sum of the different categories since some individuals fall into more than one category.

Zero wage refers to individuals who report positive hours worked but no earnings.

Table B  
Wave-by-wave sample sizes and exclusions: lone parents

	Wave						
	1	2	3	4	5	6	7
<b>Individuals</b>	13,969	13,041	12,728	12,408	12,759	12,905	12,789
<b>Households</b>	7,682	7,245	7,096	6,987	7,125	7,139	7,063
<b>Lone-parent households</b>	720	681	683	661	696	677	658
<b>Numbers of observations (of lone parents) with</b>							
<b>&lt; 25 or &gt; 59 years old</b>	126	110	104	107	124	127	136
<b>Retired</b>	62	68	63	66	77	77	86
<b>Student</b>	18	27	16	16	9	10	11
<b>Self-employed</b>	23	37	39	36	45	35	34
<b>Works in family business</b>	3	1	2	1	1	2	1
<b>Disabled</b>	37	35	41	29	34	41	42
<b>Zero wage</b>	25	26	34	26	32	30	26
<b>Hours over 60</b>	5	4	9	4	5	2	7
<b>Total excluded</b>	214	201	213	191	217	217	226
<b>Usable observations</b>	506	480	470	470	479	460	432

Note that the total number of observations excluded is less than the sum of the different categories since some individuals fall into more than one category.

Zero wage refers to individuals who report positive hours worked but no earnings.

#### Notes to Tables A and B on other sample reductions

##### Wave 1

**Partnered women** There are 8781 persons who report being in couple households based upon the household type variable (AHHTYPE) and relationship in household variables (AHHRIH01-AHHRIH16) with other household members. We remove 36 persons who live in households where there are unrelated people living together, 158 persons who live in multi-family households and 475 persons without matching partner information. We are left with 4,049 household which contain partnered women.

**Lone parents** There are 785 households with un-partnered parents. We remove 20 lone parents who live in households where there are unrelated people living together and 45 who live in multi-family households. We are left with 720 lone parent households.

##### Wave 2

**Partnered women** There are 8114 persons who report being in couple households based upon the household type variable (BHHTYPE) and relationship in household variables (BHHRIH01-BHHRIH16) with other household members. From this group, we remove 49 persons who live in households where there are unrelated people living together, 126 persons who live in multi-family households and 403 persons without matching partner information. We are left with 3,757 household which contain partnered women.

**Lone parents** There are 725 households with un-partnered parents. We remove 12 lone parents who live in households where there are unrelated people living together and 32 who live in multi-family households. We are left with 681 lone parents.

### Wave 3

**Partnered women** There are 7851 persons who report being in couple households based upon the household type variable (CHHTYPE) and relationship in household variables (CHHRIH01-CHHRIH16) with other household members. From this group, we remove 39 persons who live in households where there are unrelated people living together, 130 persons who live in multi-family households and 356 persons without matching partner information. We are left with 3,653 household which contain partnered women.

**Lone parents** There are 733 households with un-partnered parents. We remove 18 lone parents who live in households where there are unrelated people living together and 32 who live in multi-family households. We are left with 683 lone parents.

### Wave 4

**Partnered women** There are 7594 persons who report being in couple households based upon the household type variable (DHHTYPE) and relationship in household variables (DHHRIH01-DHHRIH16) with other household members. From this group, we remove 26 persons who live in households where there are unrelated people living together, 118 persons who live in multi-family households and 404 persons without matching partner information. We are left with 3,512 household which contain partnered women.

**Lone parents** There are 726 households with un-partnered parents. We remove 17 lone parents who live in households where there are unrelated people living together and 48 who live in multi-family households. We are left with 661 lone parents.

### Wave 5

**Partnered women** There are 7722 persons who report being in couple households based upon the household type variable (EHHTYPE) and relationship in household variables (EHHRIH01-EHHRIH16) with other household members. From this group, we remove 32 persons who live in households where there are unrelated people living together, 137 persons who live in multi-family households and 393 persons without matching partner information. We are left with 3,565 household which contain partnered women.

**Lone parents** There are 761 households with un-partnered parents. We remove 18 lone parents who live in households where there are unrelated people living together and 47 who live in multi-family households. We are left with 696 lone parents.

### Wave 6

**Partnered women** There are 7826 persons who report being in couple households based upon the household type variable (FHHTYPE) and relationship in household variables (FHHRIH01-FHHRIH16) with other household members. From this group, we remove 62 persons who live in households where there are unrelated people living together, 172 persons who live in multi-family households and 350 persons without matching partner information. We are left with 3,608 household which contain partnered women.

**Lone parents** There are 734 households with un-partnered parents. We remove 12 lone parents who live in households where there are unrelated people living together and 45 who live in multi-family households. We are left with 677 lone parents.

### Wave 7

**Partnered women** There are 7809 persons who report being in couple households based upon the household type variable (GHHTYPE) and relationship in household variables (GHHRIH01-GHHRIH16) with other household members. From this group, we remove 55 persons who live in households where there are unrelated people living together, 182 persons who live in multi-family households and 400 persons without matching partner information. We are left with 3,574 household which contain partnered women.

**Lone parents** There are 708 households with un-partnered parents. We remove 9 lone parents who live in households where there are unrelated people living together and 41 who live in multi-family households. We are left with 658 lone parents.

Table 1  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	8,118	2,152
Unemployed and not in the labour force	2,985	1,145
<b>Total</b>	11,103	3,297 (including 401 males)

Table 1a: Wave 1  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1357	300
Unemployed and not in the labour force	573	206
<b>Total</b>	1,930	506 (including 59 males)

Table 1b: Wave 2  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1133	297
Unemployed and not in the labour force	505	183
<b>Total</b>	1,638	480 (including 65 males)

Table 1c: Wave 3  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1114	305
Unemployed and not in the labour force	460	165
<b>Total</b>	1,574	470 (including 62 males)

Table 1d: Wave 4  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1074	299
Unemployed and not in the labour force	380	171
<b>Total</b>	1,454	470 (including 54 males)

Table 1e: Wave 5  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1124	318
Unemployed and not in the labour force	358	161
<b>Total</b>	1,482	479 (including 58 males)

Table 1f: Wave 6  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1163	327
Unemployed and not in the labour force	371	133
<b>Total</b>	1,534	460 (including 54 males)

Table 1g: Wave 7  
*Sample sizes by labour force status*

<b>Labour force status</b>	<b>Married women</b>	<b>Lone parents</b>
Employed	1153	306
Unemployed and not in the labour force	338	126
<b>Total</b>	1,491	432 (including 49 males)

Table 3  
*Descriptive statistics: Analysis sample from HILDA  
Waves 1 through 7 pooled*

Variable	Married Women	Lone parents
hours	23.1 (17.6)	21.6 (19.0)
hours (workers only)	31.6 (12.5)	33.0 (13.1)
$\ln(wage_i)$ (workers only)	2.99 (0.43)	2.92 (0.45)
age	0.40 (0.085)	0.42 (0.084)
kidspreschool	0.27	0.18
schoolkids	0.44	0.61
olderkids	0.25	0.43
nonreskids	0.14	0.26
homeowner	0.26	0.18
partner's wage ( $wage_p$ )	1.11 (0.72)	n/a
poorenglish	0.014	0.017
university	0.30	0.20
schoolincomp	0.30	0.36
experience ( $exper$ )	0.16 (0.089)	0.17 (0.10)
Sample size	11,103	3,297

*Notes: Means with standard errors in parentheses. Standard errors suppressed for indicator variables. For wage and partner wage data we use the imputed gross weekly salary and wage income for all jobs. Source variable in HILDA is FWSCEI.*

Table 3a: Wave 1  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	21.7 (17.8)	19.0 (19.0)
hours (workers only)	30.8 (12.9)	32.1 (13.8)
$\ln(wage_i)$ (workers only)	2.88 (0.47)	2.74 (0.45)
Age (age/100)	0.39 (0.083)	0.40 (0.085)
kidspreschool	0.29	0.22
schoolkids	0.45	0.60
olderkids	0.24	0.38
nonreskids	0.13	0.28
homeowner	0.30	0.18
partner's wage ( $wage\_p$ )	0.97 (0.66)	n/a
poorenglish	0.0197	0.028
university	0.26	0.18
schoolincomp	0.36	0.42
experience ( $exper$ )	0.16 (0.084)	0.16 (0.096)
Sample size	1930	506

Table 3b: Wave 2  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	21.9 (18.0)	19.6 (19.0)
hours (workers only)	31.6 (12.6)	31.6 (14.3)
$\ln(wage_i)$ (workers only)	2.90 (0.40)	2.83 (0.41)
Age (age/100)	0.39 (0.084)	0.41 (0.084)
kidspreschool	0.26	0.23
schoolkids	0.44	0.61
olderkids	0.24	0.37
nonreskids	0.14	0.25
homeowner	0.30	0.21
partner's wage ( $wage\_p$ )	0.98 (0.63)	n/a
poorenglish	0.020	0.013
university	0.26	0.18
schoolincomp	0.34	0.38
experience ( $exper$ )	0.16 (0.087)	0.17 (0.098)
Sample size	1639	480

Table 3c: Wave 3  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	22.4 (17.9)	21.3 (19.1)
hours (workers only)	31.7 (12.5)	32.8 (13.5)
$\ln(wage_i)$ (workers only)	2.93 (0.38)	2.91 (0.43)
Age (age/100)	0.39 (0.083)	0.42 (0.082)
kidspreschool	0.27	0.20
schoolkids	0.46	0.61
olderkids	0.25	0.41
nonreskids	0.14	0.25
homeowner	0.27	0.19
partner's wage ( $wage\_p$ )	1.05 (0.67)	n/a
poorenglish	0.014	0.021
university	0.29	0.18
schoolincomp	0.32	0.38
experience ( $exper$ )	0.16 (0.087)	0.17 (0.10)
Sample size	1574	470

Table 3d: Wave 4  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	23.2 (17.3)	21.1 (19.0)
hours (workers only)	31.5 (12.1)	33.1 (13.0)
$\ln(wage_i)$ (workers only)	2.98 (0.38)	2.93 (0.41)
Age (age/100)	0.40 (0.083)	0.42 (0.082)
kidspreschool	0.26	0.17
schoolkids	0.46	0.63
olderkids	0.26	0.44
nonreskids	0.13	0.26
homeowner	0.26	0.19
partner's wage ( $wage\_p$ )	1.12 (0.71)	n/a
poorenglish	0.013	0.021
university	0.30	0.19
schoolincomp	0.30	0.36
experience ( $exper$ )	0.17 (0.088)	0.17 (0.11)
Sample size	1454	470



Table 3e: Wave 5  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	24.0 (17.4)	22.4 (18.9)
hours (workers only)	31.6 (12.5)	33.7 (12.4)
$\ln(wage_i)$ (workers only)	3.03 (0.46)	2.98 (0.41)
Age (age/100)	0.40 (0.083)	0.42 (0.082)
kidspreschool	0.26	0.16
schoolkids	0.45	0.62
olderkids	0.24	0.47
nonreskids	0.15	0.25
homeowner	0.25	0.17
partner's wage ( $wage\_p$ )	1.19 (0.73)	n/a
poorenglish	0.012	0.017
university	0.32	0.20
schoolincomp	0.28	0.32
experience ( $exper$ )	0.17 (0.090)	0.17 (0.11)
Sample size	1482	479

Table 3f: Wave 6  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	24.2 (17.4)	24.0 (18.5)
hours (workers only)	32.0 (12.3)	33.7 (12.3)
$\ln(wage_i)$ (workers only)	3.09 (0.41)	3.00 (0.42)
Age (age/100)	0.40 (0.085)	0.43 (0.084)
kidspreschool	0.25	0.15
schoolkids	0.43	0.58
olderkids	0.26	0.48
nonreskids	0.14	0.25
homeowner	0.23	0.16
partner's wage ( $wage\_p$ )	1.22 (0.74)	n/a
poorenglish	0.0098	0.013
university	0.33	0.21
schoolincomp	0.26	0.31
experience ( $exper$ )	0.16 (0.091)	0.17 (0.11)
Sample size	1534	460

Table 3g: Wave 7  
*Descriptive statistics*

Variable	Married Women	Lone parents
hours	24.9 (17.3)	24.0 (18.8)
hours (workers only)	32.2 (12.3)	33.9 (12.7)
$\ln(wage_i)$ (workers only)	3.15 (0.42)	3.04 (0.50)
Age (age/100)	0.40 (0.085)	0.43 (0.086)
kidspreschool	0.26	0.16
schoolkids	0.42	0.60
olderkids	0.26	0.47
nonreskids	0.14	0.25
homeowner	0.22	0.18
partner's wage ( $wage\_p$ )	1.30 (0.80)	n/a
poorenglish	0.0074	0.0069
university	0.34	0.22
schoolincomp	0.25	0.32
experience ( $exper$ )	0.17 (0.092)	0.17 (0.11)
Sample size	1491	432

Table 5  
*Probit results: probability of working*  
*Marginal effects (standard errors)*  
*Waves 1 through 7 pooled*

<b>Variable</b>	Partnered	Lone
	Women	Parents
Age <sup>(a)</sup>	-0.021** (0.0015)	-0.15** (0.0029)
Poor English	-0.34** (0.086)	-0.44** (0.10)
University	0.13** (0.014)	0.12** (0.038)
School incomplete	-0.095** (0.018)	-0.082** (0.032)
Experience <sup>(b)</sup>	0.025** (0.0014)	0.024** (0.0018)
Preschool kids	-0.35** (0.017)	-0.32** (0.038)
School age kids	-0.024* (0.014)	-0.15** (0.029)
Older children	0.097** (0.015)	0.037 (0.032)
Non-resident kids	0.059** (0.019)	-0.015 (0.032)
Home owner/paying mortgage	-0.013 (0.016)	-0.040 (0.038)
Partner's earnings	-0.031** (0.0093)	
Male		-0.063 (0.055)
<b>Dummy variables for each wave</b>		
Wave 2	-0.025** (0.012)	0.0021 (0.024)
Wave 3	-0.017 (0.013)	0.044* (0.025)
Wave 4	0.013 (0.013)	0.032 (0.028)
Wave 5	0.039** (0.013)	0.069** (0.028)
Wave 6	0.038** (0.013)	0.14** (0.027)
Wave 7	0.055** (0.013)	0.13** (0.028)
Sample size	11,103	3297
Log likelihood value	-4612.3	-1485.7

Notes: \*\* statistically significant at the 5 per cent level (or higher).

\* statistically significant at the 10 per cent level (or higher).

Standard errors are calculated taking into account clustering from inclusion of multiple observations on same individuals across waves.

<sup>(a)</sup> Marginal effect for a one year increase in age.  $\frac{Age}{100}$  is used in regression.

<sup>(b)</sup> Marginal effect for a one year increase in experience.  $\frac{Exper}{100}$  and its square are used in regression.

Table 5a: Wave 1  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-2.93** (0.23)	-2.68** (0.52)
Poor English	-0.38** (0.10)	-0.17 (0.16)
University	0.17** (0.023)	0.16** (0.071)
School incomplete	-0.087** (0.026)	-0.14** (0.054)
Experience	4.77** (0.52)	6.44** (1.10)
Experience squared	-3.78** (1.43)	-7.32** (2.89)
Preschool kids	-0.40** (0.031)	-0.39** (0.073)
School age kids	0.030 (0.023)	-0.21** (0.057)
Older children	0.089** (0.027)	-0.016 (0.065)
Non-resident kids	0.031 (0.034)	-0.066 (0.061)
Home owner/paying mortgage	-0.0021 (0.026)	-0.024 (0.070)
Partner's earnings	-0.049* (0.016)	
Male		-0.23** (0.084)
Sample size	1930	506
Log likelihood value	-822.7	-238.8

Table 5b: Wave 2  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-3.04** (0.26)	-2.25** (0.53)
Poor English	-0.31** (0.12)	-0.51** (0.17)
University	0.20** (0.025)	0.16** (0.065)
School incomplete	-0.082** (0.029)	-0.066 (0.057)
Experience	5.41** (0.55)	6.06** (1.05)
Experience squared	-5.88** (1.43)	-6.31** (2.72)
Preschool kids	-0.36** (0.034)	-0.27** (0.081)
School age kids	0.0036 (0.026)	-0.023 (0.061)
Older children	0.12** (0.028)	0.072 (0.065)
Non-resident kids	0.088** (0.034)	-0.011 (0.064)
Home owner/paying mortgage	0.0070 (0.029)	-0.15** (0.071)
Partner's earnings	-0.019 (0.015)	
Male		-0.16** (0.087)
Sample size	1638	480
Log likelihood value	-728.9	-228.8

Table 5c: Wave 3  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-2.58** (0.26)	-2.27** (0.51)
Poor English	-0.34** (0.14)	-0.53** (0.16)
University	0.16** (0.026)	0.088 (0.070)
School incomplete	-0.10** (0.030)	-0.10* (0.057)
Experience	4.73** (0.55)	4.35** (1.05)
Experience squared	-4.36** (1.47)	-2.03 (2.97)
Preschool kids	-0.37** (0.034)	-0.32** (0.081)
School age kids	-0.053** (0.025)	-0.16** (0.060)
Older children	0.11** (0.028)	0.027 (0.065)
Non-resident kids	0.018 (0.038)	-0.037 (0.065)
Home owner/paying mortgage	0.0086 (0.030)	-0.026 (0.074)
Partner's earnings	-0.033* (0.018)	
Male		-0.038 (0.085)
Sample size	1574	470
Log likelihood value	-675.7	-202.9

Table 5d: Wave 4  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-2.55** (0.27)	-1.88** (0.50)
Poor English	-0.29** (0.17)	-0.61** (0.11)
University	0.13** (0.025)	0.019** (0.062)
School incomplete	-0.086** (0.030)	-0.075 (0.059)
Experience	4.90** (0.52)	5.48** (0.96)
Experience squared	-5.28** (1.34)	-7.01** (2.61)
Preschool kids	-0.35** (0.036)	-0.34** (0.083)
School age kids	-0.059** (0.026)	-0.24** (0.059)
Older children	0.13** (0.026)	0.026 (0.061)
Non-resident kids	0.019 (0.040)	0.028 (0.066)
Home owner/paying mortgage	-0.055* (0.032)	0.030 (0.072)
Partner's earnings	-0.016 (0.016)	
Male		-0.025 (0.093)
Sample size	1454	470
Log likelihood value	-580.2	-201.7

Table 5e: Wave 5  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-2.28** (0.24)	-2.19** (0.48)
Poor English	-0.28** (0.16)	-0.54** (0.20)
University	0.11** (0.024)	0.13* (0.061)
School incomplete	-0.099** (0.030)	-0.086 (0.056)
Experience	3.86** (0.47)	3.43** (0.85)
Experience squared	-3.21** (1.30)	-1.92 (2.49)
Preschool kids	-0.29** (0.034)	-0.37** (0.080)
School age kids	-0.061** (0.024)	-0.18** (0.054)
Older children	0.084** (0.026)	0.038 (0.058)
Non-resident kids	0.057* (0.030)	-0.098 (0.064)
Home owner/paying mortgage	-0.018 (0.027)	-0.014 (0.073)
Partner's earnings	-0.025* (0.015)	
Male		0.087 (0.074)
Sample size	1482	479
Log likelihood value	-575.9	-211.1



Table 5f: Wave 6  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-1.99** (0.23)	-1.85** (0.42)
Poor English	-0.37** (0.15)	-0.52** (0.21)
University	0.063** (0.024)	0.032 (0.059)
School incomplete	-0.12** (0.030)	-0.071 (0.053)
Experience	3.26** (0.44)	3.26** (0.77)
Experience squared	-1.58 (1.27)	-1.85 (2.21)
Preschool kids	-0.29** (0.033)	-0.26** (0.082)
School age kids	-0.018 (0.023)	-0.11** (0.051)
Older children	0.051* (0.027)	0.052 (0.052)
Non-resident kids	0.095** (0.028)	0.071 (0.050)
Home owner/paying mortgage	-0.022 (0.029)	-0.044 (0.067)
Partner's earnings	-0.025* (0.014)	
Male		-0.031 (0.084)
Sample size	1534	460
Log likelihood value	-618.9	-194.4

Table 5g: Wave 7  
*Probit results: probability of working*  
*Marginal effects (standard errors)*

<b>Variable</b>	Married Women	Lone Parents
Age	-2.00** (0.23)	-1.58** (0.43)
Poor English	-0.52** (0.23)	-0.44* (0.26)
University	0.11** (0.022)	0.075 (0.057)
School incomplete	-0.081** (0.030)	-0.016 (0.053)
Experience	3.20** (0.42)	3.83** (0.82)
Experience squared	-2.35** (1.17)	-3.67* (2.33)
Preschool kids	-0.34** (0.034)	-0.24** (0.086)
School age kids	-0.045** (0.022)	-0.15** (0.054)
Older children	0.083* (0.024)	0.057 (0.055)
Non-resident kids	0.099** (0.024)	-0.0068 (0.059)
Home owner/paying mortgage	-0.053* (0.030)	-0.037 (0.067)
Partner's earnings	-0.040** (0.012)	
Male		-0.081 (0.092)
Sample size	1491	432
Log likelihood value	-568.8	-178.8