THE ANALYSIS EXAMINES THE ATTITUDES TOWARDS THE ECONOMIC, TOURISM, AND SOCIETAL IMPACTS CONCERNING THE PERCEPTION OF BENEFITS FOR THE PEOPLE IN THAILAND REGARDING THE BELT AND ROAD INITIATIVE (BRI) POLICY

[1]RATTANAPORN KASEMSRI, [2]KESTSIRIN THEERATHITICHAIPA, [3]MANLIKA SEEFONG

[1]School of Civil Engineering, Institute of Engineering, Suranaree University of Technology, 111 Maha Witthayalai Rd, Suranari, Mueang Nakhon Ratchasima 30000, Thailand,
[2,3] School of Transportation Engineering, Institute of Engineering, Suranaree University of Technology, 111 Maha Witthayalai Rd, Suranari, Mueang Nakhon Ratchasima 30000, Thailand
E-mail: [1]kasemsri@sut.ac.th, [2]d6500573@g.sut.ac.th, [3]d6500580@g.sut.ac.th

Abstract - The Belt and Road Initiative (BRI) is widely discussed and attracts significant attention worldwide due to its impact on the economy, politics, and global security. This study was conducted in Thailand, a pivotal location in upper ASEAN, connected to the BRI via both land and sea routes. Therefore, the study aims to explore the attitudes of people living on the Thai-Lao border towards the Belt and Road Initiative (BRI) policy and its perceived benefits. The study considers various factors such as the economy, tourism, and societal aspects, including Foreign Direct Investment, Tourism, Employment, Education, and Living Standards. To analyze these factors, this study employed the independent samples T-test and one-way analysis of variance to examine differences in attitudes among Thai individuals residing in border areas with Laos. The results indicate that gender differences between men and women influence attitudes and perceived benefits regarding BRI policies, particularly in terms of employment and living standards. Moreover, differences in residential areas, whether urban or rural, impact attitudes and perceptions of benefits related to BRI policies in tourism and education. Additionally, variations in age groups within society affect attitudes and perceptions of benefits concerning foreign direct investment and living standards. Furthermore, differences in income levels influence attitudes and perceptions of benefits regarding BRI policies in foreign direct investment, tourism, and education. Ultimately, the findings from this study can inform agencies involved in policy development in Thailand, aiding them in aligning with the BRI policy to effectively foster economic development, tourism, and societal advancement in the country.

Keywords - Belt and Road Initiative (BRI), Attitude, Independent samples T-test, One-Way Anova Test

I. INTRODUCTION

Currently, China's Belt and Road Initiative (BRI) is the subject of widespread discussion and is closely monitored worldwide due to its extensive influence on economic, political, and global security realms. It has been dubbed as a new era of globalization, integrating economies domestically and across seas **[1]**. By connecting more than 60 countries across Asia, Africa, and Europe **[2]**, under the framework of five cooperation mechanisms including trade, finance, and socio-cultural connectivity, it plays a significant role in shaping the direction of global trade and investment.

In the context of Thailand being a developing country with geographical potential, it has played a significant role in driving ASEAN connectivity since 2009, particularly with key routes such as the Western Economic Corridor linking Myanmar, Thailand, Laos, and Vietnam through road and railway construction. Additionally, the Southern Economic Corridor connects Thailand's cities via Myanmar to Dawei, then through Bangkok to the east to Phnom Penh and Ho Chi Minh City. Moreover, the Northern-Southern Economic Corridor links Southern China to Kunming, Nanning, via Myanmar, Laos, Thailand, Malaysia, to Singapore **[3]**. Thailand also serves as a hub in upper ASEAN connecting both overland and maritime routes of the BRI, notably the China-Indochina Peninsula Economic Corridor (CICPEC), one of the six economic corridors under the BRI framework. Considering the aforementioned significance, studying the attitudes and perceptions of Thai people towards the Belt and Road Initiative (BRI) policy is crucial for readiness and capacity-building to collaborate with China and adapt to the changes stemming from the initiation of the Belt and Road Initiative (BRI) routes.

At present, there are several strategically significant permanent border crossings along the Thai-Lao border in the northern region, including the Chiang Saen Checkpoint, Chiang Khong Checkpoint, and Huai Kon Checkpoint. These checkpoints play a crucial role in connecting with China's Belt and Road Initiative (BRI) route due to their potential and safety. The Thai government and neighboring governments have reached agreements regarding these areas, recognizing them as important connection points for Thailand's trade and investment with foreign nations. They serve as vital trade channels for the transportation of goods and facilitate cross-border movements, greatly benefiting Thailand. Additionally, these checkpoints are under the readiness of the Thai security department to control and prevent any potential impacts on national defense. Furthermore, they serve as natural conduits for local residents to travel and communicate across the border. **[4]**

Based on the aforementioned significance, the objective of this study is to examine the attitudes towards the perceived benefits among Thai individuals residing along the Thai-Laos border towards the Belt and Road Initiative (BRI) policy. To achieve this objective, the study aims to survey five key factors to assess the social and economic impacts of BRI, including Foreign Direct Investment, Tourism,

Employment, Education, and Living Standards [2, 5-9]. Furthermore, in preparation for policy readiness and to maximize the potential of border areas for the benefit of relevant agencies in accommodating the changes that will arise from the initiation of the Belt and Road Initiative (BRI).

II. METHODOLOGY

This study collected data from border checkpoints of Thailand bordering with the Lao, totaling 660 samples, using face-to-face interview questionnaires. The questionnaire comprises two parts: 1) demographic data of respondents and 2) attitudes towards the economic, tourism, and societal impacts concerning the perception of benefits among people in Thailand along the Thai-Lao border towards the Belt and Road Initiative (BRI) policy. The attitude variables used in this study were derived from factors impacting the economy, tourism, and society, including Foreign Direct Investment, Tourism, Employment, Education, and Living Standards. The questionnaire format in this study was designed as a Likert scale of 7 points, ranging from strongly disagree to strongly agree (where 1 indicates strongly disagree and 7 indicates strongly agree). We validated the content validity of the questionnaire using the Item-Objective Congruence (IOC) index assessed by three experts and considered questions with IOC values higher than 0.50. The IOC values of the questions included in the questionnaire ranged from 0.67 to 1.00 [10]. When examined in terms of precision and reliability, Cronbach's alpha for each variable ranged from 0.724 to 0.810, exceeding the minimum threshold recommended by previous research of 0.70, allowing further analysis of the data [11].

The statistic used to analyze the significance of differences between population data and factors influencing the economy, tourism, and social perception of the benefits of individuals in Thailand regarding the BRI policy is one-way analysis of variance (ANOVA). In this analysis, the population data, which serves as the independent variable in this study, includes gender, age, residential area, and income. Hypotheses for analyzing the results are as follows:

Hypothesis 1: Thai individuals of different genders have different perceptions regarding the economic, tourism, and social impacts and benefits of the BRI policy.
Hypothesis 2: Thai individuals residing in urban and rural areas have different perceptions regarding the economic, tourism, and social impacts and benefits of the BRI policy.
Hypothesis 3: Thai individuals of different age groups have different perceptions regarding the economic, tourism, and social impacts and benefits of the BRI policy.
Hypothesis 4: Thai individuals with different income levels have different perceptions regarding the economic, tourism, and social impacts and benefits of the BRI policy.

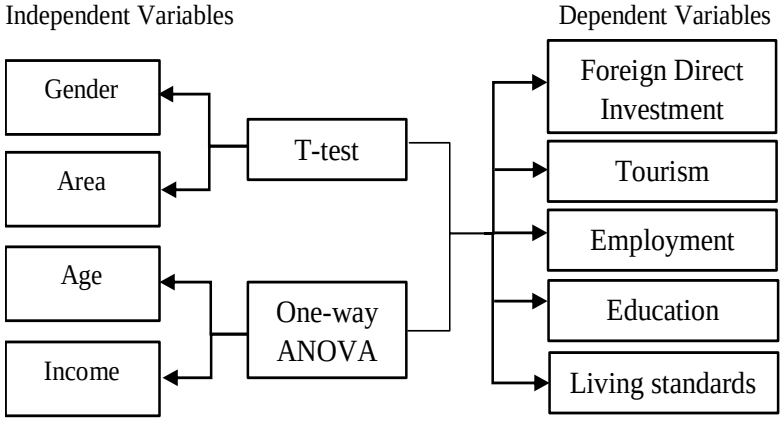

Fig. 1. Conceptual framework

III. RESULT

A. Sample Demographics

Demographic data regarding participants in the survey conducted in the Thai-Lao border areas indicate that there were 339 female respondents (51.4%) and 321 male respondents (48.6%). The majority of survey respondents were in the age range of 26-43 years (66.7%), followed by the age groups of 44-59 years (22.7%), 18-25 years (7.0%), and over 60 years (3.6%). Regarding residential areas, the majority of respondents lived outside urban areas, totaling 424 individuals (64%), while 236 individuals (36%) resided in urban areas. In terms of income, the majority had incomes less than or equal to 10,000 Baht (45.3%). This was followed by incomes greater than 15,000 Baht (33.6%) and incomes ranging from 10,001 to 15,000 Baht (21.1%). The data is presented in Table 1.

Characteristics	Frequency (n=660)	Percentage
Gender		
Male	321	48.6
Female	339	51.4
Area		
Urban	236	36.0
Rural	424	64.0
Age		
18-25 Year (Gen Alpha)	46	7.0
26-43 Year (Gen Y)	440	66.7
44-59 Year (Gen X)	150	22.7
> 60 year (Baby Boomer)	24	3.6
Income (bath)		
Less than 10,000	299	45.3
10,001-15,000	139	21.1
More than 15,000	222	33.6

TABLE I: DESCRIPTIVE STATISTICS

B. Descriptive statistics

The results of hypothesis testing analyzed using independent sample t-tests and one-way analysis of variance (ANOVA) with all 5 factors, including: 1) Foreign Direct Investment, 2) Tourism, 3) Employment, 4) Education, 5) Living standards and social norms, and independent variables such as gender, age, income, and residential area (urban or rural), are as follows:

1) Results of Hypothesis 1

Hypothesis number 1 can be examined using an independent samples t-test to assess the variances between males and females regarding their attitudes towards the economic impact, travel, and societal aspects related to the BRI policy. The outcomes of this analysis are presented in Table 2.

Variables	Gender	Mean	S. D	t	p-value
FDI	Male	4.75	0.732	1.012	0.422
	Female	4.70	0.733		
Tourism	Male	4.73	0.915	0.825	0.399
	Female	4.67	0.928		
Employment	Male	4.66	0.746	0.328	0.032**
	Female	4.64	0.843		
Education	Male	4.72	0.831	2.011	0.119
	Female	4.58	0.901		
Living standards	Male	4.61	0.841	0.344	0.022**
	Female	4.59	0.929		

TABLE II: INDEPENDENT SAMPLES T-TEST: MALE VS. FEMALE
Note: **p < 0.01, *p < 0.05, FDI = Foreign Direct Investment

From Table 2, the results of the T-TEST test between males and females found that the attitudes of Thai people on the Thai-Lao border towards economic impacts travel and society towards the BRI policy in terms of foreign direct investment Opinions of males (M = 4.75, SD = 0.732) and females (M = 4.70, SD = 0.733) regarding tourism.

Opinions of males (M = 4.73, SD = 0.915) and females (M = 4.67, SD = 0.928) regarding employment. Opinions of males (M = 4.66, SD = 0.746) and females (M = 4.64, SD = 0.843). This factor was statistically significant at 0.05 (t = 0.328, p = 0.032). In the field of education, opinions of males (M = 4.72, SD = 0.831) and females (M = 4.58, SD = 0.901) and living standards and society Opinions of males (M = 4.61, SD = 0.841) and females (M = 4.59, SD = 0.929). This factor was statistically significant at 0.05 (t = 0.344, p = 0.022).

2)Results of Hypothesis 2

The second hypothesis can be examined through an independent samples t-test to assess the disparities in attitudes towards the economic, tourism, and societal impacts of the BRI policy between individuals residing in urban and rural areas. The outcomes of this analysis are illustrated in Table 3.

Variables	Area	Mean	S. D	t	p-value
FDI	Urban	4.79	0.780	1.623	0.705
	Rural	4.69	0.697		
Tourism	Urban	4.59	0.972	-2.218	0.050**
	Rural	4.76	0.883		
Employment	Urban	4.65	0.860	-0.083	0.226
	Rural	4.66	0.765		
Education	Urban	4.60	0.934	-0.943	0.047**
	Rural	4.67	0.839		
Living standards	Urban	4.55	0.938	-1.257	0.078
	Rural	4.64	0.842		

TABLE III: INDEPENDENT SAMPLES T-TEST: URBAN VS. RURAL
Note: **p < 0.01, *p < 0.05, FDI = Foreign Direct Investment

From Table 3, the results of the T-TEST between urban and rural areas revealed that Thai individuals residing in the border areas between Thailand and Laos have different attitudes towards the economic impact, travel, and societal aspects related to the BRI policy. Regarding foreign direct investment, the opinions of urban residents (M = 4.79, SD = 0.780) differed from those of rural residents (M = 4.69, SD = 0.697). Concerning tourism, urban residents (M = 4.59, SD = 0.972) and rural residents (M = 4.76, SD = 0.883) held varying opinions. This factor was statistically significant at 0.05 (t = -2.218, p = 0.050). Regarding employment, the opinions of urban residents (M = 4.65, SD = 0.860) and rural residents (M = 4.66, SD = 0.765) were also different. In terms of education, urban residents (M = 4.60, SD = 0.934) and rural residents (M = 4.67, SD = 0.839) had divergent opinions. This factor was statistically significant at 0.05 (t = -0.943, p = 0.047). Additionally, regarding living standards and society, the opinions of urban residents (M = 4.55, SD = 0.938) and rural residents (M = 4.64, SD = 0.842) also differed.

3) Results of Hypothesis 3 and 4

Hypothesis 3 and 4 can indeed be tested using one-way analysis of variance (ANOVA). This method helps in examining the differences in attitudes towards the economic impact, travel, and societal aspects related to the BRI policy among individuals of different ages and income levels. The results of this analysis are presented in Table 4.

Dependent Variables	Inpendent Variable	Mean Square		F	Sig
		Between Group	Within Group		
FDI	Age	2.540	0.754	3.369	0.018*
	Income	4.588	0.750	6.114	0.002*
Tourism	Age	0.482	0.851	0.566	0.638
	Income	3.957	0.840	4.710	0.009*
Employment	Age	0.370	0.636	0.581	0.627
	Income	0.106	0.636	0.166	0.847
Education	Age	0.730	0.627	1.164	0.323
	Income	2.720	0.621	4.378	0.013*
Living standards	Age	4.469	1.026	4.356	0.005*
	Income	1.020	1.042	0.979	0.376

TABLE IV: ONE WAY ANOVA TEST
Note: **p < 0.01, *p < 0.05, FDI = Foreign Direct Investment

From Table 4, the results of the one-way ANOVA test show that the average attitudes towards the economic impact, travel, and society related to the BRI policy among Thai individuals on the Thai-Lao border vary significantly across different factors. Regarding foreign direct investment, when considering the independent variables of age (F = 3.369, p = 0.018) and income (F = 6.114, p = 0.002), significant differences are observed, indicating that both age and income have a significant influence on attitudes towards foreign direct investment. In terms of tourism, considering the independent variable of income (F = 4.710, p = 0.009), significant differences are observed, indicating that income level significantly affects attitudes towards tourism. Concerning education, considering the independent variable of income (F = 4.378, p = 0.013), significant differences are observed, suggesting that income level significantly influences attitudes towards education. Regarding living standards and society, considering the independent variable of age (F = 4.356, p = 0.005), significant differences are observed, indicating that age significantly influences attitudes in this aspect. However, concerning employment, the independent variables of age and income do not show significant differences, indicating that they do not significantly influence attitudes towards employment.

IV. DISCUSSION AND CONCLUSION

For this study, we examined the variation in average attitudes among Thai individuals residing along the

Thai-Lao border regarding economic impacts, travel, and societal views concerning the BRI policy. We utilized factors pertinent to the economy, travel, and societal dynamics obtained from prior literature reviews [2]. These factors encompassed foreign direct investment, tourism, employment, education, and standards of living and social conditions. We employed independent samples T-test and one-way analysis of variance (ANOVA) to analyze the population data. The findings indicated that there were significant differences in the average opinions concerning the BRI policy among Thai demographics, including gender, age, income, and residential area (urban or rural). These demographic factors were all found to be statistically significant when compared with various factors associated with the economy, travel, and society that influence the BRI policy.

Therefore, when considering the results of the study from the test using independent samples, we obtained several important findings. Firstly, it was discovered that among males, there was a higher average perception of benefits than economic impacts, travel, and society's response to the BRI policy compared to females. This observation was consistent across all factors, indicating that males have a higher average perception than females, whether it be regarding direct investment from abroad, tourism, employment, education, or living and social standards. This finding aligns with Dolan's (2011) research, which suggests that women have lower levels of knowledge in politics, economics, tourism, and society compared to men [12]. Additionally, Gidengil et al. (2003) also pointed out that differences in gender status affect policy perceptions [13]. Furthermore, the results also indicate that employment factors significantly influence gender status, meaning that different genders have varying impacts on employment attitudes. This finding is related to studies indicating that gender differences are reflected in beliefs about employment-related attitudes [14]. Moreover, differences in living standards and social factors have significant differences on sexual status. That is, different genders have different effects on attitudes, standards of living, and society. This finding is related to studies indicating that gender differences affect society's well-being and economic growth [15]. The second finding relates to residential areas. It was found that regarding foreign direct investment, people living in urban areas have a higher average awareness than people living outside cities. However, conversely, people living outside the city have a higher average perception than people living in the city in terms of tourism, employment, education, and living and social standards. This finding is consistent with the research of Wisutwattanasak et al. (2023), which indicates that differences in attitudes among urban and non-urban populations are important for perception and attitude expression, including the needs and expectations of living in society [16, 17]. Additionally, the results of differences in residential areas also show significant differences in tourism factors, which are important to the residential area. Different residential areas have different effects on tourism attitudes. This finding is related to studies indicating that residents in rural and urban contexts have different perceptions of factors influencing tourism development [18]. Moreover, educational factors are significantly different for residential areas. Different areas of residence have different effects on educational attitudes. This finding is related to studies indicating that people between urban and rural areas have different attitudes towards education [19].

Furthermore, the results of this study also utilized analysis of variance (ANOVA) method, which yielded significant findings indicating that among groups with different ages, there are significant differences in perceptions regarding foreign direct investment (FDI) factors. This finding aligns with research indicating that respondents with different ages have varied attitudes towards FDI factors [20]. Additionally, factors related to living standards and society in groups with different age levels significantly influence attitudes. This finding is consistent with research indicating that individuals with different ages have reflections on lifestyle and different living standards and social attitudes [21]. Lastly, the results of this study also demonstrate that among groups with different income levels, there are significant differences in perceptions regarding foreign direct investment (FDI) factors. This finding aligns with studies that found individuals with different income levels have varying attitudes towards FDI [22]. Furthermore, groups with different income levels have significant differences in attitudes towards tourism factors. This finding aligns with research showing that the impact of income level differences influences the demand for different international tourism factors [23]. Additionally, groups with different income levels have significant differences in attitudes towards educational factors. This finding aligns with research indicating that individuals with different income levels have different expressions of attitudes towards educational factors [24]. Moreover, studies have identified that increasing income inequality affects changes in educational opportunities [25].

RECOMMENDATION

The research study conducted in this instance can truly assist in enabling future development planners regarding railways to understand the genuine needs of Thai people residing in the Thai-Lao border areas. This is beneficial for the perspective of a developing country and can be applied in various other countries as well. This research can be observed from the viewpoint of residents living in the border areas of

Thailand adjacent to the Belt and Road Initiative (BRI) railway route. Therefore, future research can further build upon this study by expanding the sample group to include other demographics, such as residents from all regions of Thailand. Additionally, in the future, other factors such as experiences with using the China-Laos high-speed railway (BRI) service could be incorporated for consideration, broadening the scope of the study to cover various perspectives comprehensively.

REFERENCES

[1] T. Teo, G. Sang, B. Mei, and C. K. W. Hoi, "Investigating pre-service teachers' acceptance of Web 2.0 technologies in their future teaching: a Chinese perspective," Interactive Learning Environments, vol. 27, no. 4, pp. 530-546, 2019.

[2] V. Khamphengvong, H. Zhang, Q. Wu, and T. Thavisay, "Examine the economic and social effects on Lao people's perceived benefit attitudes towards BRI," Sustainability, vol. 14, no. 9, p. 5088, 2022.

[3] Department of International Trade Promotion. "The Belt and Road Initiative helps revive the global economy from the impact of the COVID-19 pandemic." (accessed.

[4] Office of the National Security Council. "Operation Plan for Border Security and Stability Management (2566 - 2570)." (accessed.

[5] T. Chakraborty, H. Gundimeda, and V. Kathuria, "Have the special economic zones succeeded in attracting FDI?—Analysis for India," Theoretical Economics Letters, vol. 7, no. 3, pp. 623-642, 2017.

[6] T. Dang, D. Nguyen, T. Trinh, T. Banh, and T. Nguyen, "The impact of ODA in constructing road traffic infrastructure on Vietnam's economic growth," Journal of Project Management, vol. 6, no. 2, pp. 99-106, 2021.

[7] M. Daye, K. Charman, Y. Wang, and B. Suzhikova, "Exploring local stakeholders' views on the prospects of China's Belt & Road Initiative on tourism development in Kazakhstan," Current Issues in Tourism, vol. 23, no. 15, pp. 1948-1962, 2020.

[8] V. Snieska and I. Simkunaite, "Socio-economic impact of infrastructure investments," Engineering economics, vol. 63, no. 3, 2009.

[9] P. Supanyo, "Tourism cooperation under the belt and road initiative: BRI and tourism opportunities in Phayao Province, Thailand," Turkish Journal of Computer and Mathematics Education (TURCOMAT), vol. 12, no. 8, pp. 2533-2537, 2021.

[10] P. R. Hinton, I. McMurray, and C. Brownlow, SPSS explained. Routledge, 2014.

[11] M. Tavakol and R. Dennick, "Making sense of Cronbach's alpha," International journal of medical education, vol. 2, p. 53, 2011.

[12] K. Dolan, "Do women and men know different things? Measuring gender differences in political knowledge," The Journal of Politics, vol. 73, no. 1, pp. 97-107, 2011.

[13] E. Gidengil, A. Blais, R. Nadeau, and N. Nevitte, "Women to the left? Gender differences in political beliefs and policy preferences," Women and electoral politics in Canada, pp. 140-159, 2003.

[14] K. L. McGinn and E. Oh, "Gender, social class, and women's employment," Current opinion in Psychology, vol. 18, pp. 84-88, 2017.

[15] S. Seguino, "Taking gender differences in bargaining power seriously: Equity, labor standards, and living wages," in Feminist economics and the World Bank: Routledge, 2006, pp. 112-134.

[16] C. Wienke and G. J. Hill, "Does place of residence matter? Rural–urban differences and the wellbeing of gay men and lesbians," Journal of Homosexuality, vol. 60, no. 9, pp. 1256-1279, 2013.

[17] P. Wisutwattanasak et al., "Modeling Extended Service Quality for Public Transportation in the Post-Pandemic Period: Differentiating between Urban and Rural Areas: A Case Study of Intercity Railway, Thailand," Logistics, vol. 7, no. 4, p. 93, 2023.

[18] S. M. Rasoolimanesh, J. L. Roldán, M. Jaafar, and T. Ramayah, "Factors influencing residents' perceptions toward tourism development: Differences across rural and urban world heritage sites," Journal of Travel Research, vol. 56, no. 6, pp. 760-775, 2017.

[19] K. Lounkaew, "Explaining urban–rural differences in educational achievement in Thailand: Evidence from PISA literacy data," Economics of Education Review, vol. 37, pp. 213-225, 2013.

[20] K. Zeng and X. Li, "Geopolitics, nationalism, and foreign direct investment: Perceptions of the China threat and American public attitudes toward Chinese FDI," The Chinese Journal of International Politics, vol. 12, no. 4, pp. 495-518, 2019.

[21] R. Berthoud, M. Blekesaune, and R. Hancock, "Ageing, income and living standards: evidence from the British Household Panel Survey," Ageing & Society, vol. 29, no. 7, pp. 1105-1122, 2009.

[22] T. Pan-Long, "Foreign direct investment and income inequality: Further evidence," World development, vol. 23, no. 3, pp. 469-483, 1995.

[23] G. I. Crouch, "Effect of income and price on international tourism," Annals of Tourism Research, vol. 19, no. 4, pp. 643-664, 1992.

[24] G. L. Beckles, B. I. Truman, C. f. D. Control, and Prevention, "Education and income—United States, 2009 and 2011," MMWR Suppl, vol. 62, no. 3, pp. 9-19, 2013.

[25] D. Bloome and B. Western, "Cohort change and racial differences in educational and income mobility," Social forces, vol. 90, no. 2, pp. 375-395, 2011.

★★★