Plamen Nikolov
Department of Economics
State University of New York (at Binghamton)
Binghamton, NY 13902

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Dear Ms. Stillwell,

I am attaching my cover letter summarizing my research interests, past research and future direction of my research. As you can see a significant portion of my research agenda encompasses subjective well-being, health and aging issues with a focus on developing countries. I have also attached a copy of my CV. Below I summarize my three main research areas.

Achieving higher levels of health, education and productivity in developing countries could considerably improve wellbeing and promote better economic outcomes. My research aims to understand the causes and consequences of these two forms of human capital (*i.e.,* health and education) and also aims to examine various ways to boost productivity directly. I study these issues through fieldwork, in a combination of experimental and quasi-experimental methods embedded in longitudinal data collection efforts, which I use to perform empirical tests of microeconomic theory and to quantify the effects of potential policies.

Health is a major focus of my research to date. One strand of my work in the health area empirically examines the presence of the so-called Peltzman effects especially in the context of low-income countries. The Peltzman effect (after Sam Peltzman's seminal paper posited the theoretical mechanism that seatbelt regulation could increase unsafe driver behavior) is a form of *ex post* moral hazard. The effect is the hypothesized general tendency of people to react to a safety regulation by increasing other risky behavior, offsetting some or all of the benefit of the regulation. I am interested in empirically testing for evidence of the Peltzman effect. Currently billions of dollars flow towards alleviation international development goals in countries in Sub-Saharan Africa to fight the HIV virus, to address maternal mortality issues, to tackle nutrition problems and to fight other infectious diseases. However, little is known regarding the potential offsetting behavior response to such interventions at the individual level. I empirically test for the Peltzman effect in the contexts of two interventions in Sub-Saharan Africa: an HIV therapy program in South Africa and a nutritional program for pregnant women in Tanzania.

Another strand of my work in the health area relates to the determinants and consequences of *cognitive capital* in early childhood. Cognitive capital is the stock of the most critical micronutrients that influence brain development during brain development. In a field experimental project in Tanzania, I examine the causal role of cognitive capital (*i.e.,* the presence of the most important micronutrients that influence brain development during the brain formation childhood stages) and poor in utero environment on early childhood outcomes.

Education is another major area of my research and I focus on three main areas: quantifying the monetary and non-monetary returns to skill enhancement and schooling; understanding determinants of cognitive development, and the subsequent impact of better cognitive skills on schooling outcomes in Sub-Saharan Africa. In a project in Nepal, using quasi-experimental methods, I (jointly with Shubha Chakravarty, Mattias Lundberg and Juliane Zenker) estimate the short-term effects of skills training and employment placement services in Nepal. In a second project, I (jointly with Shubha Chakravarty, Mattias Lundberg and Juliane Zenker), examine the short-term effects of training on entrepreneurship in Nepal. We also examine the effect of the training program on various entrepreneurial traits. We focus on various entrepreneurial traits– from psychological empowerment, entrepreneurial self-confidence, and financial literacy to control over resources. In a third project (also jointly with Shubha Chakravarty, Mattias Lundberg and Juliane Zenker), we focus on the effect of skill enhancement on empowerment for females.

A third research area of mine relates to various levers to boost productivity. In recent projects I examine various determinants of productivity: cooperative behavior, credit constraints, risk-taking and the role of self-confidence. With Sam Asher and Maoliang Ye, I examine determinants of successful group coordination in the context of public goods and what drives people's decision to contribute to a common pool. In a different project focused on the interplay between time preferences and risk preferences, I examine the role of an investment with a delay on individual risk preferences. I find that when an investment decision is delayed, individuals exhibit more willingness to take on a risky investment. In a third and ongoing project (with Tracy Xia, Yonglin Liang and Nan Jiang), I examine how exogenous shocks to individual confidence levels influence subsequent performance on a task.

1. Health: Returns to Health Investments and Behavioral Responses

My health research centers on the immediate and short-run behavioral responses (i.e., Peltzman effects) to health interventions in developing countries. Providing health benefits, often conferred by government programs, may increase individuals' tendencies to adjust their behavior in response to the perceived level of risk, and thus encouraging individuals to behave less cautiously where they feel more protected and more cautiously where they feel a higher level of risk. I am also interested in the ultimate effect of such behavioral responses on health outcomes.

I explore the presence of Peltzman effects (a form of *ex post* moral hazard) in the context of the HIV/AIDS epidemic in Africa. Using field experimental data from South Africa, I present evidence consistent with this argument. I find that the demand for unsafe sex increases once a patient obtains access to HIV therapy. *Ceteris paribus*, HIV therapy increases the number of sexual partners by 0.95 and decreases the probability of condom use by 0.33. These self-reported results are corroborated by a slight positive increase in childbearing by HIV-positive female patients. *Ceteris paribus*, therapy results in 0.20 more children per woman since the onset of the study. The effects of therapy on behavior are more pronounced for males then for females.

In a second field experimental study based on a follow-up to an individual-level randomized control trial in Tanzania, I collected follow-up data between 2011 and 2012 to an experimental intervention with nutritional supplements initially offered to HIV- pregnant women in Dar es Salaam, Tanzania. The trial was initially conducted between 2001 and 2004. Neuroscience studies have shown that deficiency in four micronutrients -- B6, B9 (folic acid) and B12, and iodine -- results in irreversible and continuous damage to individuals' cognitive capacity. In this project, I explore whether the deficiency in B6, folic acid and B12 influence of health outcomes 10 years after the initial randomization. I also explore whether parents allocate resources so as to compensate for or to reinforce inequalities in initial health endowments across children. To address this question, the project focuses on these nutrients because only they exert persistent and continuous effect on learning over the lifespan of individuals.

My ongoing research in this area tries to disentangle biological and behavioral mechanisms driving changes in the outcomes and inform theoretical models of human behavior in low-income contexts.

2. Education: Consequences of Skill Formation, Cognition and Determinants of Demand for Schooling

Private investments in education remain low in many developing countries, even after the introduction of free primary education. Because improving schooling outcomes can improve social well-being on a number of social indicators, understanding the drivers of low demand for schooling in Sub-Saharan Africa and East Africa, in particular, remains an important question. More generally, understanding the education production function in low-income countries has important theoretical and policy implications.

An unsuspected (at least in classical models that study individual demand for schooling) determinant for the low demand for education may lie in poor maternal nutrition for important micronutrients in early pregnancy. While most micronutrient deficiencies are likely to be resolved with improvements in economic outcomes by way of rising caloric intake, deficiency in utero for four nutrients in particular (B6, B9, B12, and iodine) has been biologically linked to irreversible and continuous damage to cognitive development throughout an individual's lifetime (*i.e., cognitive capital* in utero). Cognitive capital is the stock of the most critical micronutrients that influence brain development during brain development. Fundamental to any discussion of economic issues is factors that influence growth to productivity and economic outcomes. Growth entails the expansion of an indivdual's productive capacity, his or her output, or income, and his or her living standards. I am interested in how cognitive capital -- the most critical micronutrients that influence brain development during brain development – influence subsequent adult economic and non-economic outcome. In one arm of my ongoing experimental project in Tanzania (described above), I examine the effect of three of these nutrients, B6, B9 and B12, on subsequent cognitive development, school enrollment, attendance rates, educational attainment, non-cognitive outcomes and parental behavior responses.

A third education area of my focus has to do with the returns to skill formation in monetary and non-monetary dimensions. In a quasi-experimental project in Nepal, I (jointly with Shubha Chakravarty, Mattias Lundberg and Juliane Zenker) explore the impacts of a training program offered to unemployed individuals. In this project, we examine one of the largest youth training interventions in Nepal, serving almost 15,000 youth annually. A component of the training program, called the Adolescent Girls Employment Initiative (AGEI) and launched in 2009, specifically targeted adolescent girls among 4,410 Nepali women aged 16-24 over a three-year period. Using a combination of a difference-in-difference and propensity score matching methods, we estimate the short-term effects of skills training and employment placement services in Nepal. In three separate papers, we focus on employment outcomes, entrepreneurship and empowerment outcomes. We find, after three years of the program, the EF intervention positively improved employment outcomes. EF training program participation generated an increase in non-farm employment of 15 to 16 percentage points for an overall gain of about 50 percent. The program also generated an average monthly earnings gain by about 72 percent. We find significantly larger employment impacts for women than for men, but younger women aged 16 to 24 experienced the same improvements as older females. We also detect sizable improvements in self-employment, entrepreneurial traits and female empowerment outcomes.

A major theme in all of my ongoing education-related projects is to uncover both what models of behavior are best-suited to explain human capital investment decisions in low-income settings. Ultimately, I am also interested in linking my research findings to inform policy regarding low-cost effective interventions that can boost schooling outcomes in the African context: better schooling outcomes offer the potential to dramatically improve a society's quality of life in developing countries.

3. Boosting Productivity

A third strand of my ongoing research relates to various ways to boost productivity.

Agricultural production in low-income countries is generally poorly diversified, focusing on rain-fed staple crop and animal raising. In the empirical literature, many researchers have found that risks cause farmers to be less willing to undertake activities and investments that have higher expected outcomes, but carry with them risks of failure. For example, Duflo and Kremer (2010) find that farm households use less fertilizer, improved seeds and other production inputs than they would have used had they simply maximized expected profits. It is also not uncommon to observe farm households in developing countries being reluctant to adopt new technologies even when those technologies provide higher returns to land and labor than traditional technologies. One aspect of this reluctance is reaction to risk.

In an ongoing project, I explore the interplay between time delays and risk-taking. In the project, I use data from an experiment in Tanzania to estimate the causal effects of introducing a time delay on risk preferences. The study proceeded in three stages. During Stage 1, we asked each subject to make a plan regarding splitting a monetary investment amount between a risky asset and a safe asset. We informed each subject in Stage 1 that he or she would receive the money and execute their Stage

1 plan at Stage 2. Stage 3 was the asset payout date: subjects returned and were informed, based on a flip of a coin, whether their risky asset was successful or not. We tested how the timing of Stage 2 influenced individuals' allocation made at Stage 1 into the risky asset. We find that individuals who executed their investment plans later exhibited a higher risk tolerance at Stage 1. The study provides empirical evidence of time inconsistency in the investment domain.

Successful coordination is at the core of a wide variety of economic and political situations. Nonetheless, coordination failure is common in the real world. Based on a framed field experiment conducted in China, one of my projects (joint with Sam Asher and Maoliang Ye) examines how the pattern of varying threshold levels influences group coordination at high-threshold levels. Of primary interest in varying the threshold level successively is the role of gradualism. We define gradualism as the hypothesis that proposes that allowing agents to coordinate first on small and easy-to-achieve goals and then increasing the level of goals slowly over the course of a game facilitates subsequent coordination on otherwise hard-to-achieve outcomes. We find that successful coordination at a high-stakes level in the Gradualism treatment group was very high. Our findings suggest that for a group to establish successful coordination at a high level, it is better to begin at a low-stake level and, equally important, to increase the stake level slowly. The paper sheds light on how to foster group coordination in a context where it is not clear how to structure incentives for individual players.

In another field experimental project in Bangladesh, I explore how credit constraints can positively influence farmer productivity. Recent empirical evidence based on microfinance interventions with informal microenterprises demonstrate positive marginal returns to capital and positive impacts on investment, business size, and profits. However, access to more credit influences the environment in which small farm households make production and investment decisions. Expanding credit access can influence the interplay between the context of informal markets and a firm's capacity to transform inputs into output. Although credit expansion has positive impacts on a number of microenterprise outcomes no previous credible evidence examines the effect of credit expansion on firm efficiency. In a joint project with Nusrat Jimi and Subal Kumbakar, we use a natural field experiment to identify the causal effects of credit access on the productivity and technical efficiency of farm enterprises. We exploit random assignment of credit services by BRAC, one of the largest microfinance NGOS in Bangladesh, on the village level. In addition to identifying the causal effects of credit access on the productivity and technical efficiency of farm enterprises, we also examine how these two outcomes vary by farm characteristics. We find that expanding access to credit results, on average, in 13 percent increase in farm efficiency.

In an ongoing lab experimental project (with Yonglin Liang, Tracy Xia and Nan Jiang), I examine the impact of exogenous changes to an individual's level of confidence on subsequent performance. Although past studies have examined the impact of monetary incentives and nonmonetary feedback on productivity, no experimental research uses exogenous shocks to stress and anxiety to examine the impacts of individual task confidence on subsequent productivity.

My general interest in this third domain is to uncover various levers that ultimately can boost productivity and can be welfare enhancing.

PLAMEN NIKOLOV

Email: pnikolov@binghamton.edu

ACADEMIC POSITIONS

2014– present	Assistant Professor of Economics, Department of Economics, State University of New York (at Binghamton)
2013– 2014	Adjunct Instructor (Sophomore Tutorial), Department of Economics, Harvard University

PROFESSIONAL AFFILIATIONS

2013- present	Institute for Quantitative Social Studies, Harvard University, Faculty Affiliate
2015- present	Center for the Economics of Human Development, University of Chicago, Faculty Affiliate

EDUCATION

Year	Institution	Degree Type
2014	Harvard University	Doctorate *(Doctoral Advisors: Lawrence Katz, Raj Chetty, David Cutler, Amitabh Chandra)*
2008	Johns Hopkins University, School of Advanced International Studies	Masters
2004	American University in Cairo	ALI Institute, Advanced Arabic Certification
2000	Ohio Wesleyan University	Bachelors

PEER-REVIEWED PUBLICATIONS

Nikolov, Plamen (with Jimi, N.) *"What Factors Drive Individual Misperceptions of the Returns to Schooling in Tanzania? Some Lessons for Education Policy"* (Forthcoming, Applied Economics)

Nikolov, Plamen. "*Are Risk Preferences Time Inconsistent? Evidence from An Investment Experiment." (Forthcoming, Economics Bulletin*)

OTHER PUBLICATIONS

Nikolov, Plamen (with Shubha Chakravarty & Mattias Lundberg & Juliane Zenker). The role of training programs for youth outcomes in Nepal. World Bank Policy Research Paper, 2016: WPS7656

Nikolov, Plamen. "The AIDS Epidemic and Its Economic Roots." Harvard Health Policy Review, 10(1), 2009.

Nikolov, Plamen. "Justice and Allocation in International Health Aid," Johns Hopkins SAIS Perspectives, 2007 (1).

Plamen Nikolov, Tim Dall and Paul Hogan. "Economic Costs of Diabetes in the United States." Journal of Diabetes Care, vol 26, pp 1421-1426, Mar 2003.

REVISE AND RESUBMIT

Nikolov, Plamen (with Ye, M., Zheng J. and S. Asher) "*One Step at a Time: Does Gradualism Foster Group Coordination?*" (*Revisions requested, 2nd round, Management Science*)

Nikolov, Plamen (with Chakravarty, S., Lundberg, M. and J. Zenker). **"***The Short-Term Effects of Training Programs on Youth Employment: Evidence from Nepal."* (*Revise and resubmit, Journal of Development Economics*)

Nikolov, Plamen "*Does HIV Therapy Stimulate Risky Sexual Behavior? A Field Experiment in South Africa.*" (*Revise and resubmit, Journal of Development Studies*)

Nikolov, Plamen (with Acker, K.) "The Monetary Value of Political Affiliation" (*Revise and resubmit*)

WORKING PAPERS

Nikolov, Plamen (with Jimi, N. Kumbhakar, S. and M. Malek). *"Does Credit Access Improve Firm Output? Evidence from a Field Experiment in Bangladesh." (Submitted)*

Nikolov, Plamen (with Chakravarty, S., Lundberg, M. and J. Zenker). "T*he Value of Training Programs for Transformative Entrepreneurship. Evidence from a Regression Discontinuity Design." (Submitted)*

Nikolov, Plamen (with Adelman, A.). "The Impact of Pension Benefits on Intra-household Allocations" (*Submitted*)

Nikolov, Plamen "*Do Parental Investments Reinforce or Offset Children's Endowments at Birth? (Submitted)*

Nikolov, Plamen (with Chakravarty, S. and J. Zenker). *"Human Capital and Marital Age Preferences: Quasi-experimental Evidence from Nepal." (In preparation for submission)*

Nikolov, Plamen (with Chakravarty, S., Lundberg, M. and J. Zenker). *"Vocational Training and Intimate Partner Violence: Quasi-experimental Evidence from Nepal." (In preparation for submission)*

WORK IN PROGRESS

Nikolov, Plamen (with T. Xia and Y. Liang) "*The effect of task-confidence on productivity"*

Nikolov, Plamen. *"Empirical Estimates of Risk Preferences and Time Preferences in Low-income Countries"*

PRACTITIONER ARTICLES & BOOK CHAPTERS

"Writing Economics Research Papers." 2013. Harvard DASH, Available at http://nrs.harvard.edu/urn-3:HUL.InstRepos:11041649.

TEACHING

(at SUNY Binghamton unless noted otherwise)
Undergraduate: Development Economics, Honors Thesis Seminar, Labor Markets in Developing Countries (at Harvard), Microeconomics of Health and Development (at Harvard)
Masters: Microeconomic Theory, Development Economics (at Harvard Kennedy School), Political Economy (at Harvard SPH)
Doctoral: Development Economics, PhD Seminar

RESEARCH GRANTS

2014	EU Commission Marie Curie Micro One World Research Grant
2012	National Science Foundation Research Fellowship (Economics Program) - top 1% of reviewed NSF proposals for the Economics Program
2012	Harvard Center for Population and Development Studies Research Seed Grant
2012, 2010	Harvard Economics Department LEAP Center Research Grant
2011-2012	CEPR Development Economics AMID Marie Curie Research Grant
2011	Harvard Weatherhead Center for International Affairs mid-dissertation Grant
2011	Mind, Brain and Behavior (Harvard Medical School Initiative) Research Grant
2011	Russell Sage Foundation Behavioral Economics Grant
2010	Harvard Institute for Global Health (HIGH) Doctoral Fellowship Grant
2009	Hewlett Foundation/IIE Dissertation Fellowship Grant

RECOGNITION AWARDS

2015	Dean's Research Semester Award (Spring 2017)
2013, 2010	Harvard Faculty of Arts and Sciences Teaching Distinction Certificate
2011	Spencer Foundation Dissertation Fellowship Finalist (rated among the top 20 applicants out of 1000 doctoral applicants)
2010	Joseph R. Levenson Memorial Teaching Prize Finalist (Harvard Faculty of Arts and Sciences)

PROFESSIONAL SERVICE

Student Theses and Independent Project Supervision: COMMITTEES (PAST AND PRESENT)

Nusrat Jimi	Economics (advisor, State University of New York (at Binghamton), 2016-present
Matthew Schwartz	Economics (main advisor overseeing a successful research publication at Alpenglow Journal, State University of New York (at Binghamton), 2016 https://www.binghamton.edu/undergraduate-research-journal/natural-disasters.html
Michael Lentini	Economics (main advisor overseeing a successful research publication at Alpenglow Journal, State University of New York (at Binghamton), 2016 https://www.binghamton.edu/undergraduate-research-journal/natural-disasters.html
Kevin Acker	Economics (main advisor), State University of New York (at Binghamton), 2015
Kelly Hyde	Economics (undergraduate honors thesis), State University of New York (at Binghamton), 2015 Thesis: Conditions of Scarcity and Optimization Behavior

UNIVERSITY APPOINTMENTS

Fall 2017-Spring 2018	SUNY Binghamton, Economics Department, Admissions Committee PhD Program
Fall 2016-Spring 2017	SUNY Binghamton, Economics Department, Junior Micro Theory Search Committee
Fall 2015-Spring 2016	SUNY Binghamton, Economics Department, Junior Labor Economics Search Committee
Spring 2015	SUNY Binghamton, Economics Department, PhD Doctoral Seminar Supervisor

Fall 2014 SUNY Binghamton, Economics Department, IT Committee, Member

REFEREE ACTIVITY

Empirical Economics, Journal of African Business, Journal of Health Economics, Health Economics

INVITED PRESENTATIONS

2017

1st IZA Workshop on Gender and Family Economics (Bonn, Germany), PacDev (2017), University of Gottingen

2016

American Economic Association Annual Conference, Jan 2016; Population Association of America, Mar 2016; University of Oxford (Adolescence, Youth and Gender Conference), Sept 2016; American Agricultural Economics Association Conference, July 2016.

2015

Syracuse University Maxwell School, Nov 2015 (declined)

2014

Augustana College, Feb 2014; Albion College Feb 2014; Florida International University, March 2014, Oxford University Blavatnik School of Government, March 2014; Yale University (SPH), March 2014; State University of New York at Binghamton, March 2014; University of Southern California, March 2014; University of Missouri, March 2014; University of Washington, March 2014; PopPov Annual Conference in Nairobi, Kenya, Jan 2014; American Economic Association Annual Conference, Jan 2014.

2013

ICASA Annual Conference South Africa, Dec 2013; Simposio de la Asociacion Espanola de Economia, Spain, December 2013, 2013 Centre for the Study of African Economies Conference on Economic Development, Oxford University; 42nd Australian Conference of Economists, Australia, July 2013; Inequalities in Children's Outcomes in Developing Countries St Anne's College, Oxford University, Jul 2013.

2012

APPAM 2012 in Baltimore, MD, Nov 2012; AIDS Economics 2012 Conference in Washington, DC, July 2012; University of Bocconi (AMID Network) Presentation, June 2012; Population Association of America, May 2012, Lancaster Business School, Feb 2012; London School of Economics STICERD Unit, Feb 2012; Université catholique de Louvain, Jan 2012; RES Conference, London Jan 2012; Hewlett Foundation PopPov Conference, Jan 2012.

2011

Solvay Brussels Business School, Oct 2011; University of Namur (FUNDP), Oct 2011; International Economics Association, June 2011; Einaudi Institute for Economics and Finance Workshop, June 2011; Hewlett Foundation PopPov Conference, Jan 2011.

2010

Hebrew University Center for Study of Rationality, July 2010; University of Cape Town, Department of Economics/SALDRU Presentation, Oct 2010; Northeast University Development Consortium, Conference Presentation, Nov 2010; RAND Summer Institute, Jul 2010; NBER Summer Institute, June 2010; University of Chicago.

2009

Price Theory Summer Camp, June 2009.

LANGUAGES

Proficient: English, Arabic, Swahili, Russian, Bulgarian, German (intermediate)