# 1NC

## Debt Ceiling DA

Debt ceiling will be raised without confrontation but lawmakers can shift

Espo 9-18 [09/18/2013. DAVID ESPO AP Special Correspondent. “Dodge default, defund Obamacare, GOP leaders say.” http://www.denverpost.com/breakingnews/ci\_24119843/ap-sources-revised-gop-attack-obamacare]

The RSC claims a membership of 175 members, about three-quarters of the

AND

estimated that without action by Congress, that default will arrive in mid-

The plan drains PC and no link turns — deficit concerns and gridlock neutralize support

Halverstadt 13 — Lisa Halverstadt, reporter at Voice of San Diego (Lisa Halverstadt, Voice of San Diego, 04-25-2013, “Waiting on Congress to Ease Border Waits”, <http://voiceofsandiego.org/2013/04/25/waiting-on-congress-to-ease-border-waits/>, Accessed 08-01-2013 | AK)

Funding to improve the world’s busiest land border crossing made it into President Barack Obama’s budget but that doesn’t mean the project will shorten lines at the San Ysidro port anytime soon.

Some San Diego politicians and business leaders have spent years advocating for the completion of

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to persuade 430 members of Congress to do the same,” Alvarez said.

Obama’s cooperation is key

Moore 9-10 [September 10, 2013. Heidi Moore is Guardian’s US Finance and Economics Editor. “Syria: the great distraction; Obama is focused on a conflict abroad, but the fight he should be gearing up for is with Congress on America's economic security.” [http://www.theguardian.com/commentisfree/2013/sep/10/obama-syria-what-about-sequester]](http://www.theguardian.com/commentisfree/2013/sep/10/obama-syria-what-about-sequester))

Before President Obama speaks to the nation about Syria tonight, take a look at

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better. As it is, he should now judge his actions better.

That staves off economic collapse

Davidson 9-10 [September 10, 2013. Adam Davidson is the co-founder of NPR’s Planet Money. 9/10/2013, “Our Debt to Society.” [http://www.nytimes.com/2013/09/15/magazine/our-debt-to-society.html?pagewanted=all&\_r=0]](http://www.nytimes.com/2013/09/15/magazine/our-debt-to-society.html?pagewanted=all&_r=0))

This is the definition of a deficit, and it illustrates why the government needs

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free asset more risky, the entire global economy becomes riskier and costlier.

Global economic decline leads to miscalculation and crisis escalation—escalates

Harris and Burrows, ‘09 [Mathew, PhD European History at Cambridge, counselor in the National Intelligence Council (NIC) and Jennifer, member of the NIC’s Long Range Analysis Unit “Revisiting the Future: Geopolitical Effects of the Financial Crisis” <http://www.ciaonet.org/journals/twq/v32i2/f_0016178_13952.pdf>]

Increased Potential for Global Conflict Of course, the report encompasses more than economics and

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within and between states in a more dog-eat-dog world.

## T QPQ

Interpretation – economic engagement must be conditional

Shinn 96 [James Shinn, C.V. Starr Senior Fellow for Asia at the CFR in New York City and director of the council’s multi-year Asia Project, worked on economic affairs in the East Asia Bureau of the US Dept of State, “Weaving the Net: Conditional Engagement with China,” pp. 9 and 11, google books]

In sum, conditional engagement consists of a set of objectives, a strategy for attaining those objectives, and tactics (specific policies) for implementing that strategy.

The objectives of conditional engagement are the ten principles, which were selected to preserve American vital interests in Asia while accommodating China’s emergence as a major power.

The overall strategy of conditional engagement follows two parallel lines: economic engagement, to

AND

105, no. 3 (1990), pp. 383-88).

Violation – the aff is a unilateral giving – not a quid pro quo offer

Vote negative – quid pro quo gives competition for conditions cp and say no arguments. Key to fight back against aff bias

## Race K

The 1AC is the perfection of slavery

The 1AC’s demand for legal relief is the perfection of the slave as a slave

AND

the slave expresses its fidelity and accepts it role as depending on the master

Farley 5 [Boston College (Anthony, “Perfecting Slavery”, <http://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?article=1028&context=lsfp>)]

Slavery is with us still. We are haunted by slavery. We are animated

AND

beyond the veil, beyond death; hence, the end of forever.

The topic is a red herring – US imperialism necessitates a multiplicity of justifications to create the illusion of democratic consensus – as long as Latin American diplomacy remains a tool used to defend the empire, any benevolent intent becomes whitewashed as colonial violence becomes more destructive and ubiquitous

Petras 12 (James, is a retired Bartle Professor (Emeritus) of Sociology at Binghamton University adjunct professor at Saint Mary's University “The Empire’s Ideology: Imperialism and “Anti-Imperialism of the Fools”,” http://www.globalresearch.ca/the-empire-s-ideology-imperialism-and-anti-imperialism-of-the-fools/28456)

The imperialist use of “anti-imperialist” moral rhetoric was designed to weaken

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, their peace movements dwindled, and their “moral critiques” lost resonance

Try or Die – Isolation of racially oppressed groups leads to the TERMINATION OF HUMANITY.

Marable Director of the Institute for Research in African American Studies 1984

Manning-Professor of History @ Columbia University; *“Speaking Truth to Power:* *Essays on Race, Resistance and Radicalism*; p. 198-199.

Black Americans also comprehend that peace is not the absence of conflict. As long

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the electoral mainstream, the results may be the termination of humanity itself.

Racism must be rejected in EVERY INSTANCE without surcease. It justifies atrocities, creates another and is truly the CAPITAL SIN.

Memmi ’00 [2000, Albert is a Professor Emeritus of Sociology @ Unv. Of Paris, Albert-; RACISM, translated by Steve Martinot, pp.163-165]

The struggle against racism will be long, difficult, without intermission, without remission

AND

. True, it is a wager, but the stakes are irresistible.

## Advantage CP

The United States Federal Government should fully fund a program to cover 4.8% of the surface of the Earth’s oceans in a monolayer of 0.1 μm diameter latex particles, either hollow, or of core-shell morphology, bearing a conventional stabilization system that is inactivated in salt water.

**Text: the Economic Development Administration should create a national network of advanced industries innovation hubs.**

Solves warming, only costs $2 billion, and avoids all solvency deficits associated with traditional ocean albedo modifications.

Morgan, ’11 [10/8/11, John, PhD in physical chemistry, runs R&D programmes at a Sydney startup company, research experience in chemical engineering in the US and at the Commonwealth Scientific and Industrial Research Organisation, Australia's national science agency, “Low intensity geoengineering – microbubbles and microspheres,” <http://bravenewclimate.com/2011/10/08/low-intensity-geoengineering-microbubbles-and-microspheres/>]

The appeal of this technique comes from the fact that you only need very small

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a powerful engineered response to climate change, if we can deploy them.

Innovation hubs solve manufacturing

Saha and Muro 1/14 [January 14th, 2013, Devashree, and Mark, Brookings, “Cut to Invest: Create a Nationwide Network of Advanced Industries Innovation Hubs”, <http://www.brookings.edu/research/papers/2013/01/14-federalism-series-advanced-industries-hubs>]

Congress should authorize the build-out of a national network of advanced industries (

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in the nation’s advanced industries and so strengthen their long-term competitiveness.

## Mexico Politics DA

Energy reform will pass—bipartisan support, Calderon’s reforms

Pickrell 9-20 September 20, 2013 at 2:53 pm by Emily Pickrell “Former Mexico president expects lawmakers to pass energy reforms.” http://fuelfix.com/midland/2013/09/20/former-mexico-president-expects-lawmakers-to-pass-energy-reforms/]

But his Institutional Revolutionary Party, or PRI, backs the proposal, as does

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future it will probably be irrelevant to have those reserves,” Calderón said.

US engagement with Mexico is unpopular—hyper nationalism and past interventionism produces a strong barrier to cooperation

Starr ‘12 [October 2012. Pamela K. Starr is the Director of the U.S.-Mexico Network and an Associate Professor at the Center on Public Diplomacy at the University of Southern California. “The United States and Mexican Domestic Politics,” college.usc.edu/usmexnet/wp-content/.../Camp-Oxford-paper-final.doc]

The nature, depth, and anti-American undertones of Mexican nationalism have operated

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has repeatedly found its policy autonomy constrained in situations where Congress has interests.

Nieto’s political capital is key to passage—shores up public support

Wilkinson and Fausset ’13 [August 13, 2013. Tracy Wilkinson and Richard Fausset—journalists for the LA Times. “Mexico's officials wage PR battle to sell energy reform plan.” http://articles.latimes.com/2013/aug/13/world/la-fg-mexico-pemex-pr-20130814]

Even if energy reform does deliver the advantages that Peña Nieto is promising, those

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Alberto G. "Mexico needs this to be able to move ahead."

Reform is key to solve Mexican economic growth—that’s critical to the US economy

Hale ’13 [August 15, 2013. Colin Hale is the Executive Producer at Neon Tommy, a new source at the University of Southern California; it won two L.A. Press Club awards in 2011 and received two honorable mentions.

“Mexico's Energy Reforms: What Does It Mean For The U.S.?” http://www.neontommy.com/news/2013/08/mexicos-energy-reforms-what-does-it-mean-us]

Mexican President Enrique Peña Nieto announced on Monday one of the most "sweeping economic

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Gulf of Mexico For the United States, the proposed reforms of Mexico's energy

y industry should be viewed as a positive. In the last twenty years,

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state-owned electricity utility on Monday, but to much less fanfare.

Mexican growth solves immigration

Pethokoukis 3/6/13 (James Pethokoukis is the Money & Politics columnist-blogger for the American Enterprise Institute, citing Kenneth Rogoff, Professor of Economics and Public Policy at Harvard University, “The Mexican economy and US immigration” http://www.aei-ideas.org/2013/03/the-mexican-economy-and-us-immigration/)

Marco Rubio is for a path to citizenship. Jeb Bush, apparently, is

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as much as Mexico if conditions south of the border begin breaking good.

US-Mexican border terrorism results in bioterror attacks

Ken Timmerman 10, Newsmax correspondent, “FBI Director Mueller: Al-Qaida Still Wants Nuclear Bomb,” 3/18, <http://newsmax.com/Newsfront/mueller-fbi-alqaida-nuclear/2010/03/18/id/353169>

FBI Director Robert Mueller warned Congress on Wednesday of ongoing al-Qaida efforts to

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it is properly spread in population centers there,” al-Nasifi said.

Bioterror leads to extinction

Anders Sandberg 8, is a James Martin Research Fellow at the Future of Humanity Institute at Oxford University; Jason G. Matheny, PhD candidate in Health Policy and Management at Johns Hopkins Bloomberg School of Public Health and special consultant to the Center for Biosecurity at the University of Pittsburgh Medical Center; Milan M. Ćirković, senior research associate at the Astronomical Observatory of Belgrade and assistant professor of physics at the University of Novi Sad in Serbia and Montenegro, 9/8/8, “How can we reduce the risk of human extinction?,” Bulletin of the Atomic Scientists,<http://www.thebulletin.org/web-edition/features/how-can-we-reduce-the-risk-of-human-extinction>

The risks from anthropogenic hazards appear at present larger than those from natural ones.

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may increase as biotechnologies continue to improve at a rate rivaling Moore's Law.

## Commission CP

The United States federal government should establish a presidential Cut-to-Invest Commission. The Cut-To-Invest Commission should recommend \_\_\_\_\_\_ as part of its first proposal. The Executive Branch of the United States federal government should provide the commission with all necessary resources to promote its recommendations.

The CP solves—it establishes a commission that proposes funding towards infrastructure as part of a single package with matching budgetary cuts and reforms—that ensures sustainable investment in the aff while avoiding the backlash to the plan

Weinstein, ’12 [November 2012, Paul Weinstein, is director of the Graduate Program in Public Management at Johns Hopkins University and worked for eight years in the Clinton White House, first as Special Assistant to the President and Chief of Staff of the Domestic Policy Council, and later as Senior Adviser for Policy Planning to Vice President Al Gore, “Establish a ‘Cut-to-Invest Commission’ to Reduce Low-Priority Spending, Consolidate Duplicative Programs, and Increase High Priority Investments”, http://www.brookings.edu/~/media/research/files/papers/2012/11/13%20federalism/13%20investments%20spending]

Given the need for more investment, Congress and the president should establish a Cut

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through the sunset commission process, the state received $27 in return.

## Warming

No impact – empirics

Willis, et. al, ‘10 [Kathy J. Willis, Keith D. Bennett, Shonil A. Bhagwat & H. John B. Birks (2010): 4 °C and beyond: what did this mean for biodiversity in the past?, Systematics and Biodiversity, 8:1, 3-9, <http://www.tandfonline.com/doi/pdf/10.1080/14772000903495833>

The most recent climate models and fossil evidence for the early Eocene Climatic Optimum (

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subtle changes in plant–animal interactions (Harrington & Jaramillo, 2007).]

Turn – increased carbon emissions is key to check high altitude water vapor, which outweighs – prefer our evidence – their authors falsify data and their models don’t evaluate water vapor

Andrews, ’10 [January 29, 2010, Michael Andrews, “Dropping Water Vapor Levels are Naturally Negating Carbon's Warming Effects”, http://www.dailytech.com/Dropping+Water+Vapor+Levels+are+Naturally+Negating+Carbons+Warming+Effects+/article17553.htm

\*\*\*Note – he is citing a peer-reviewed study by Susan Solomon , Karen H. Rosenlof and Robert W. Portmann, John S. Daniel, Sean M. Davis, Todd J. Sanford –research scientists for the [National Oceanic and Atmospheric Administration](http://en.wikipedia.org/wiki/National_Oceanic_and_Atmospheric_Administration), Gian-Kasper Plattner – works at Climate and Environmental Physics, Physics Institute, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland

Recently there has been a rash of incidents in which climate alarmists have been embarrassingly

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of the model based research used to predict warming is likely badly flawed.

CO2 is key to avert a global agricultural crisis and collapse of the biosphere resulting from global species extinction – outweighs the uncertain effects of warming

Idso, et. al, ’02 [Sherwood PhD and fmr research physicist for the Dept of Ag, Keith PhD Botany, Craig PhD Geography, “Feeding Humanity to Help Save Natural Ecosystems: The Role of the Rising Atmospheric CO2 Concentration”, CO2 Science, Volume 5, Number 36: 4 September 2002

How much land can ten billion people spare for nature? This provocative question was

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life, Homo sapiens, is on course to completely annihilaFeedbacks are net negative

Spencer, ’08 [2008, Roy, climatologist and a Principal Research Scientist for the University of Alabama in Huntsville, as well as the U.S. Science Team Leader for the Advanced Microwave Scanning Radiometer on NASA’s Aqua satellite, Satellite and Climate Model Evidence Against Substantial Manmade Climate Change (supercedes “Has the Climate Sensitivity Holy Grail Been Found?”) http://www.drroyspencer.com/research-articles/satellite-and-climate-model-evidence/]

What I have presented here is, as far as I know, the most

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to predict too much global warming in response to anthropogenic greenhouse gas emissions.

te fully two-thirds of the ten million or so other species with which

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Any policies that stand in the way of that objective are truly obscene.

That outweighs – the incoming agricultural crisis is of near certainty and occurs much faster – any defense on warming means you vote negative

Idso and Idso, ’02 [Keith PhD Botany, Craig PhD Geography, “Two Crises of Unbelievable Magnitude: Can We Prevent One Without Exacerbating the Other?”, CO2 Science, Volume 4, Number 24: 13 June 2001

Two potentially devastating environmental crises loom ominously on the horizon. One is catastrophic global

AND

in the foreseeable future is anywhere near as certain as the looming agricultural crisis

No warming impact – mitigation and adaptation will solve

There is no impact to warming – current sources are alarmist and misleading – impacts won’t happen for 2 centuries, by then technology will advance to the point where we can mitigate or adapt

Robert O. Mendelsohn 9, the Edwin Weyerhaeuser Davis Professor, Yale School of Forestry and Environmental Studies, Yale University, June 2009, “Climate Change and Economic Growth,” online: http://www.growthcommission.org/storage/cgdev/documents/gcwp060web.pdf

The heart of the debate about climate change comes from a number of warnings from

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range climate risks. What is needed are long‐run balanced responses.

CO2 isnt key to warming—most qualified sources, empirical data, and common sense confirm that CO2 can only force atmospheric changes on a small scale—that’s Watts. Their evidence is overhyped and based on unverifiable feedbacks

Miyazaki, PhD mathematics – University of Texas, ‘11

(K. “An Analytic Study of Climate Sensitivity,” UT Mathematical Physics database, <https://www.math.utexas.edu/mp_arc/c/11/11-16.pdf>)

Based on the Stefan-Boltzmann law, the IPCC derives the climate sensitivity of

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we can say¶ that the IPCC exaggerates the anthropogenic effects on climate.

Negaive Feedbacks

Singer ‘11, PhD physics – Princeton University and professor of environmental science – UVA, consultant – NASA, GAO, DOE, NASA, Carter, PhD paleontology – University of Cambridge, adjunct research professor – Marine Geophysical Laboratory @ James Cook University, and Idso, PhD Geography – ASU, S. Fred, Robert M. and Craig, “Climate Change Reconsidered,” 2011 Interim Report of the Nongovernmental Panel on Climate Change)

All else being equal, their conclusion might be correct. However, ―all

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induced by the increases or decreases in the atmosphere‘s CO2 concentration.

## Manufacturing

**U.S. manufacturing is resurgent---slew of factors make it sustainable and immune to a double-dip**

**PWC 9/21** [September 21st, 2012, Pricewaterhouse Coopers, “A Homecoming For U.S. Manufacturing?” <http://www.manufacturing.net/articles/2012/09/a-homecoming-for-us-manufacturing?et_cid=2861124&et_rid=279915960&linkid=http%3a%2f%2fwww.manufacturing.net%2farticles%2f2012%2f09%2fa-homecoming-for-us-manufacturing>]

NEW YORK― Consensus views on a U.S. manufacturing resurgence have largely

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attractive exporter and the relative attractiveness of the U.S. markets.”

Infrastructure’s impact on productivity is negligible

Holtz-Eakin and Schwartz, ’94 [August 1994, Douglas Holtz-Eakin is a president of the American Action Forum. He was the director of the Congressional Budget Office and a chief economist of President George W. Bush’s Council of Economic Advisers AND Amy Ellen Schwartz is a Professor of Public Policy, Education, and. Economics and Director of the NYU Institute for Education and Social Policy “INFRASTRUCTURE IN A STRUCIURAL MODEL OF ECONOMIC GROWTH,”, http://www.nber.org/papers/w4824.pdf?new\_window=1]

To anticipate the major results, we find that even in those specifications in which infrastructure enters the estimated production process significantly, there is little support for claims of a dramatic productivity boost from increased infrastructure outlays. Fo

r example, in the specification designed to provide an upper bound for the influence of infrastructure capital, we estimate an output elasticity of 0.10. However, even this estimate implies that raising the rate of infrastructure investment by 10 percent would have had a negligible impact on annual productivity growth between 1971 and 1986. The final section is a summary, with suggestions for further work in this area.

Economic power not key to hegemony

Kapila 10 [Dr. Subhash Kapila is an International Relations and Strategic Affairs analyst and the Consultant for Strategic Affairs with South Asia Analysis Group and a graduate of the Royal British Army Staff College with a Masters in Defence Science and a PhD in Strategic Studies., “21st Century: Strategically A Second American Century With Caveats,” June 26, http://www.eurasiareview.com/201006263919/21st-century-strategically-a-second-american-century-with-caveats.html]

Strategically, the 20th Century was decidedly an American Century. United States strategic,

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United States. More significantly, while examining the prospects of the 21st Centur

y as a "Second American Century" it must be remembered that besides other

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challenge and the strategic distractions arising from the global Islamic flash-points.

Sequestration should’ve triggered the aerospace impact

Toensmeier 3-5 (Pat Toensmeier, writer for Thomasnet, “Manufacturers Brace for Sequestration Impact” <http://news.thomasnet.com/IMT/2013/03/05/manufacturers-brace-for-sequestration-impact/> 3-5-13)

Manufacturers in the aerospace and defense sectors estimate that sequestration could result in the loss

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detrimental to the aerospace industry and to U.S. military capabilities.”

Economic interdependence checks China war

Perry & Scowcroft, ’09 \*Professor at Stanford University, \*\*Resident Trustee of the Forum for International Policy [William & Brent, 2009, “US Nuclear Weapons Policy,” Council on Foreign Relations]

Economic interdependence provides an incentive to avoid military conflict and nuclear confrontation. Although the

AND

Beijing-Washington relationship points toward potentially promising dialogues on larger strategic issues.

Taiwan conflict won’t draw in the U.S. – Recent developments prove

CD, ’10 [5/4/10, China Daily, “Taiwan pledges not to seek US help in war”, <http://www.chinadaily.com.cn/china/2010-05/04/content_9804241.htm>]

Beijing - Mainland experts on Monday hailed Taiwan leader Ma Ying-jeou's pledge that

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$6 billion worth of weapons, causing a tough response from Beijing.

Asymmetries of interest

Smith – IR Oxford– ‘3

Derek, Deterrence and Counterproliferation in an Age of Weapons of Mass Destruction, Destruction' Security Studies,12:4,152 — 197

One major flaw of deterrence theory is that it posits a rational actor and then

AND

we would be remiss to assume that they will never do so again.

# Block and Beyond

# CP

## 2NC Innovation

Absent the counterplan the plan fails

Saha and Muro 1/14 [January 14th, 2013, Devashree, and Mark, Brookings, “Cut to Invest: Create a Nationwide Network of Advanced Industries Innovation Hubs”, <http://www.brookings.edu/research/papers/2013/01/14-federalism-series-advanced-industries-hubs>]

In the aftermath of the Great Recession, the United States needs to transition from

AND

vitality and preeminence without a strong push to extend the leadership of AIs.

Specifically for aerospace

Saha and Muro 1/14 [January 14th, 2013, Devashree, and Mark, Brookings, “Cut to Invest: Create a Nationwide Network of Advanced Industries Innovation Hubs”, <http://www.brookings.edu/research/papers/2013/01/14-federalism-series-advanced-industries-hubs>]

In the aftermath of the Great Recession, the United States needs to transition from

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vitality and preeminence without a strong push to extend the leadership of AIs.

## 2NC Solves it

The CP stabilizes global climate change, avoids your DAs, and leads to adaptation

Seitz, ’11 [2011, Russell Seitz, “Bright water: hydrosols, water conservation and climate change”. Climatic Change. Volume 105, Numbers 3-4, 365-381]

The most recent IPCC assessment (IPCC 2007) notes that even with an immediate

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nations to simultaneously participate in domestic water conservation and international climate stabilization efforts.

Microbubbles solve all tech issues

Morgan, ’11 [10/8/11, John, PhD in physical chemistry, runs R&D programmes at a Sydney startup company, research experience in chemical engineering in the US and at the Commonwealth Scientific and Industrial Research Organisation, Australia's national science agency, “Low intensity geoengineering – microbubbles and microspheres,” <http://bravenewclimate.com/2011/10/08/low-intensity-geoengineering-microbubbles-and-microspheres/>]

Is there another way to look at this? The Achilles heel of the hydrosol

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aircraft, oil rigs, and other structures, in the mid latitudes.

# Manufacutirng

## 2NC – Manufacturing Defense

**Manufacturing improving rapidly**

**Bloomberg ’13** [January 2nd, 2013, “Outlook for 2013 Improves as U.S. Manufacturing Climbs”

<http://www.bloomberg.com/news/2013-01-02/ism-index-of-u-s-manufacturing-increased-to-50-7-in-december.html>]

Manufacturing picked up in December, reflecting growth in orders, employment and exports that

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may have held at 7.7 percent, the lowest since December 2008

Nuke primacy stops China war

Lieber and Press, ’07 [Keir A., Associate professor in the Security Studies Program at Georgetown University's Edmund A. Walsh School of Foreign Service, and Daryl G., Associate Professor of Government at Dartmouth College and Coordinator of the War and Peace Studies Program at the John Sloan Dickey Center for International Understanding, “Superiority Complex,” The Atlantic Online, July/August, http://www.dartmouth.edu/~dpress/docs/Press\_Superiority\_Complex\_ATL.pdf]

The most plausible flash point for a serious U.S.-China conflict is

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he or she would reap the benefits of the past decade’s counterforce upgrades.

## 2NC AT Offshoring

Wage increases and selective re-shoring

Heineman, 3/26 (Ben, The Atlantic, 3/26/13, http://www.theatlantic.com/business/archive/2013/03/why-we-can-all-stop-worrying-about-offshoring-and-outsourcing/274388/, "Why We Can All Stop Worrying About Offshoring and Outsourcing," alp)

Labor markets have for the past quarter century been at the center of the globalization

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more by the company and less by third parties, will remain critical.

## 2NC – Competitiveness

No decline in US economic power and no impact

Lieber 8 [Robert J., Prof of Government at Georgetown “The Declinists Are Wrong Again” Perspectives Papers on Current Affairs, Perspectives 47 July 30, 2008, http://www.biu.ac.il/Besa/perspectives47.html]

On the domestic front, the subprime mortgage crisis, investment bank turmoil, a

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of national defense do not by themselves pose an imminent danger of overstretch.

## 2NC XT No Intervention

US won’t intervene to help Taiwan

Sollenberger, student at the Johns Hopkins University, graduate Swarthmore and analyst, 10 [Matthew, spring, “Challenging US Command of the Commons:Evolving Chinese defense technologies as a threat to American hegemony?”, <http://bcjournal.org/2010/challenging-us-command-of-the-commons/>]

The advancement of Chinese military capabilities in the areas of information warfare, anti-

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this erodes one of the pillars of hegemony, namely unrivaled military prowess.

# Warming Good

## 2NC Link Wall – Long

CO2 is key to plant growth and outweighs their turns

A) All around benefits and overwhelming amounts of evidence

Idso, et. al, ’01 (Craig and Keith and Sherwood, Presidents and Vice President, Center for The Study of Carbon Dioxide and Global Change, Volume 4, Number 27: 7/4)

With respect to plant life, we encounter a somewhat different situation: we need

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in their diets, as noted in our editorial of [20 June 2001](http://www.co2science.org/v4n25edit.htm).

B) Only CO2 solves our internal link – land efficiency is key

Idso, et. al, ’02 (Craig and Keith and Sherwood, Presidents and Vice President, Center for The Study of Carbon Dioxide and Global Change, Volume 5, Number 36: 9/4)

Fortunately, we have a powerful ally in the ongoing rise in the air's CO2

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Any policies that stand in the way of that objective are truly obscene.

E) Nitrogen Uptake

Idso, et. al, ’01 (Craig and Keith and Sherwood, Presidents and Vice President, Center for The Study of Carbon Dioxide and Global Change, Volume 4, Number 13: 3/28)

For one thing, crops experiencing rising levels of atmospheric CO2 will likely produce larger

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therefore be maintained, at the very least, at their current levels.

## 2NC AT Kills Crops

Biodiversity’s resilient to temperature shifts—newest and most robust evidence—prefer small-scale models over bigger studies—both cooling and productivity loss due to CO2 are bigger threats

\*\*note: also applies to ‘warming kills biodiversity’

Tămaş ‘12, PhD Geology and senior researcher – Romanian Academy ‘Emil Racoviţă’ Institute of Speleology, Angelica Feurdean, Senckenberg Research Institute – Frankfurt, Ioan Tanţău, Department of Geology – Babeş-Bolyai University, and Sorina Fărcaş, National Institute of Research and Development for Biological Sciences, Tudor, “Elevational variation in regional vegetation responses to late-glacial climate changes in the Carpathians,” Journal of Biogeography Vol. 39, Issue 2, p. 258–271, February)

Introduction

The projected changes in temperature and precipitation by 2080 (IPCC, 2007) and increased land-use change are likely to have profound impacts on the diversity and functioning of both terrestrial and marine ecosystems (Thomas et al., 2004; Thuiller et al., 2005; Anderson & Bows, 2008; Jump et al., 2009; Sutherland et al., 2009; La Sorte & Jetz, 2010). Previous studies have shown that species are not equally vulnerable to habitat modification and climate change, and that different areas will not go through the same change in diversity and turnover. In Europe, coarse-scale species distribution models under two extreme assumptions, no- and full-migration scenarios, predict that mountains of middling values of elevation, including the Carpathians, will feature the highest proportion of species loss (up to 29%), and turnover (up to 64%), while the Pannonian lowlands are predicted to gain species up to 15% and to record a 66% increase in turnover as new Mediterranean species, tolerant of a hot and dry climate, invade at the expense of Euro-Siberian elements (Thuiller et al., 2005). However, other species distribution models run at finer scales (Trivedi et al., 2008; Randin et al., 2009), or including representation of plant demography (Hickler et al., 2009), and more accurate dispersal capability (Engler & Guisan, 2009), appear to predict a much smaller habitat and species loss than the coarse-scale models (Thomas et al., 2004; Thuiller et al., 2005; Araújo et al., 2008). All the above model predictions are based only on the current static distribution of species in relation to climate (Thomas et al., 2004; Thuiller et al., 2005; Svenning & Skov, 2007). Past climate reconstructions and simulations have shown that the dimension of precipitation- and temperature-related variables is not static in time, and hence neither are the ecological niche dimensions that influence species distribution and abundance (Jackson et al., 2009; Willis et al., 2010). A way to improve the assessment of the biotic response in a given area is to perform ecological, palaeoecological and modelling studies at multiple spatial and time scales. Fossil data are able to record multiple generations of a species through time, and can be used as a surrogate for direct measurement of biotic responses to past climate change. Palaeoecological records have been used widely to understand past vegetation dynamics, but these have often addressed the individualistic responses of species to past climate and human impact, while quantitative estimates of changes in community composition have been made less frequently (Williams et al., 2002; Birks, 2007; Birks & Birks, 2008). In this paper, seven fossil pollen sequences from Romania situated at different elevations were analysed to examine the effects of climate change on community composition and biodiversity between 15,000 and 10,500 cal. yr bp in this biogeographically sensitive region of Europe. Studies of ice-core, marine and continental records have demonstrated that this period (known as the late-glacial period and the transition to the Holocene) was characterized by large-amplitude global climate fluctuations occurring on decadal to millennial time scales (Johnsen et al., 1992; Jouzel et al., 2007). Regional cold periods occurred between c. 18,000 and 14,700 cal. yr bp (GS-2/Oldest Dryas), 14,200 and 13,800 cal. yr bp (GI-1d/Older Dryas), and 12,500 and 11,500 cal. yr bp (GS-1/Younger Dryas), whereas the major warm periods occurred between 14,700 and 14,200 cal. yr bp (GI-1e/Bølling) and 13,800 and 12,500 cal. yr bp (GI-1c-1a/Allerød) (Tămaşet al., 2005; Constantin et al., 2007; Feurdean et al., 2008). This interval offers the possibility of exploring how repeated temperature changes have affected patterns of community composition and diversity, as well as studying the recovery processes following major disruptions of community structure. While the late-glacial and early Holocene climate changes are not perfect analogues for 21st century climate change, the palaeoecological records from this time period still provide useful information on the rates of species response, and on the way species escaped extirpation (Dawson et al., 2011). By examining sites at different elevations, we attempt to identify which elevations were the most sensitive to changes in turnover and species loss. The Carpathians are characterized by heterogeneous landscapes and strong climatic and vegetational zonation, and offer great potential for examining biological responses from the lowlands to the sub-alpine zone. Direct human impact in the form of forest clearance and agriculture was minimal. However, hunter–gatherer communities might have had an impact on the herbivore population and thus indirectly affected the vegetation composition (Gill et al., 2009). Materials and methods Selected site Changes in the late-glacial vegetation communities were inferred from seven published pollen records distributed within the main vegetation belts of the Romanian Carpathians, at elevations from 275 to 1840 m (Fig. 1). These sites are dispersed across several massifs in the Carpathians and some are separated by relatively large distances (c. 50–300 km), so this is a composite elevational transect. Details of geographical settings and present vegetation composition around each site are given in Appendix S1 in the Supporting Information. The sedimentary basins include peat bogs and lakes, which are small to medium in size (0.05–3 ha). According to models of pollen dispersal, the pollen assemblages of small sites should have a source radius of a few kilometres (1–2 km) around the basins, versus tens of kilometres for medium-sized sites (10–20 km; Gaillard et al., 2008). The relevant pollen source area is also dependent on vegetation patchiness, the size and spatial distribution of the patches, and the pollen productivity and fall speed of the plant taxa involved (Sugita, 1994; Hellman et al., 2009). Given the more open landscapes and patchy vegetation distribution during the late-glacial period, it is likely that the pollen grains were able to disperse over greater distances than today (Gaillard et al., 2008). This is particularly the case for the alpine/subalpine sites, where, due to uphill pollen transport, the pollen assemblages are probably indicative of mixed vegetation coming from a wider elevational and areal range (Pellatt et al., 1998). Pollen and spore counts were converted into percentages of the terrestrial pollen sum (Fig. 2). The pollen sum is c. 450–600 grains per sample at each site studied, except for a few pollen-poor samples where this sum could not be reached. Pollen nomenclature largely follows Moore et al. (1991) except for the subfamilies within Asteraceae, which are referred to as Liguliforae and Tubuliforae. The pollen and spores are of mixed taxonomic resolution (family, genus, species) and were recorded by three analysts, but it can reasonably be assumed that a comparable taxonomic resolution applies to each analysis. In addition, plant macrofossils were available at two sites (Steregoiu and Preluca Ţiganului). Plant macrofossils are large in size, have a low dispersal capacity, and are usually deposited close to the parent plants and therefore are indicative of local floristic composition. Radiocarbon dates were recalibrated using Calib Rev 6.0. (Stuvier et al. (2005)http://radiocarbon.pa.qub.ac.uk/calib/) and the INTCAL09 dataset of Reimer et al. (2009) (Appendix S2). The new calibration curve gives smaller standard deviation (SD) errors than the previous calibration datasets, but some of the dates still fall within the plateau at c. 12,600 cal. yr bp and have large probability distribution in the calibrated age (c. 500 years). The chronology is based on linear interpolation between the midpoints of the calibrated distribution at 1 or 2 SD, and in few cases on adjusted age (Appendix S2). The age–depth models at Turbuţa, Avrig, Steregoiu, Luci, Tăul Zănoguţii and Iezerul Călimani sedimentary sequences do not show signs of hiatus in sediment deposition. At Preluca Ţiganului, however, a short hiatus occurs at 6.5 m, indicated by a sharp rise in Ulmus and Picea pollen, and a corresponding drop in Artemisia, Poaceae and Chenopodiaceae (Fig. 2). The chronology shows that the temporal resolution of the samples at Turbuţa, Avrig, Steregoiu, Preluca Ţiganului, Luci and Tăul Zănoguţii sites is between 20 and 100 years, whereas the Iezerul Călimani records changes at multi-centennial intervals (> 100 years per pollen sample). Numerical analyses In order to quantitatively determine and compare the amount of change in community composition and diversity between sequences, the following analyses were performed. The pollen records (Fig. 2) were statistically divided into pollen zones using optimal splitting based on the information content technique (Bennett, 2007). A broken-stick model, as implemented in Psimpoll, was used to assess the significant zones (Bennett, 1996, 2007). Applying the broken-stick model for optimal splitting may not always be the perfect choice, as each splitting starts anew for each successive zone (Bennett, 1996, 2007). Comparison of the results from optimal splitting with other zonation techniques, however, indicates a similar number of significant zones and statistically robust results (Bennett, 1996, 2007). To determine the compositional difference between pollen zones, a principal components analysis (PCA) was applied. PCA was implemented on datasets from all seven sites combined, and calculated based on the correlation matrix of the square root pollen percentage of selected taxa (Fig. 3). PCA was chosen because the detrended correspondence analysis shows that the longest gradient length is smaller than two SD. PCA was also used to examine: (1) whether climatic events of similar duration and magnitude lead to comparable vegetation assemblages in our sites; and (2) whether there is a distinct sensitivity of the vegetation at sites located at different elevations during the late-glacial and early Holocene. All ordinations were carried out with canoco ver. 4.5 (ter Braak & Šmilauer, 2002). Rarefaction analysis was used to determine diversity responses to rapid climate changes, that is, whether rapid and repeated climate changes lead to increased or decreased palynological diversity (Fig. 4). Rarefaction analysis was computed using Psimpoll (Bennett, 2007), and the lowest pollen count (Tn) was used to standardize the size of the pollen counts at each site (Birks & Line, 1992). Rarefaction eliminates bias in richness caused by different pollen count sizes (Birks & Line, 1992). However, this does not take the evenness into account. Because of the small samples, population abundance may strongly influence palynological richness (Odgaard, 2006). Detrended canonical correspondence analysis (DCCA) was used to determine the amount of palynological change at each site (Figs 5 & 6). Because samples in a pollen-stratigraphical sequence are in a known temporal order, this analysis uses age as the external constraint (Birks, 2007; Birks & Birks, 2008), that is, the age–depth file is uploaded as environmental data. Results were scaled in SD units, and changes in palynological composition for the late-glacial and early Holocene were estimated by looking at the range of sample scores on the first, time-constrained DCCA axis, where each value represents a position of a pollen sample relative to the entire gradient scale. Thus, larger variation in the sample scores within a sequence implies greater compositional changes. Turnover, a measure of the total palynological changes over the late-glacial and the Holocene, was calculated as the difference between the highest and lowest values from each sequence. Datasets were prepared in two ways: with all seven sites irrespective of their basal late-glacial age; and using only samples aged between 13,000 and 10,500 cal. yr bp, the interval covered by all seven sequences, in order to ensure that trends in compositional turnover were not affected by using sequences of different duration (Birks, 2007). Before analysis, percentages of all terrestrial pollen and spores were square-root transformed and detrended by segments, with no down-weighting of rare taxa and nonlinear scaling. Results Regional patterns in vegetation dynamics The late-glacial and early Holocene periods were characterized by rapid and recurrent changes in vegetation composition: alternation between high abundances of pollen of trees and of herbaceous taxa (Fig. 2). Zonation of the pollen records revealed between two and six significant zones (Fig. 2). A few, non-significant pollen zones that appear to show similar features in the pollen assemblages at several sites were also considered (Figs 2 & 3a,b). Significant zones are marked with an asterisk, and the first letter of the site name is used as the identifying code for each local assemblage zone at each sequence. The zone boundary marking the transition from the late-glacial to the Holocene is statistically significant at all sites. There is also a statistically significant zone at 6.49 m at Preluca Ţiganului, but this split is due to a sedimentary hiatus at this level and was therefore not included in Figs 2 & 3. Warm intervals are distinguished from cold intervals using these zones (Figs 2 & 3a,b). Results from the broken-stick model indicate that the first two PCA axes are statistically significant and explain 58.9 and 17.2%, respectively, of the total variance. The PCA diagram shows that there is a separation of the pollen samples into distinct clusters (Fig. 3). Samples from the pollen zones A2, PT1, S2, L1 and IC1 (14,700–14,200 cal. yr bp, Bølling) cluster close to those from zones T1, A4, PT3, S3, L3, L4 and TZ2 (13,800–12,900 cal. yr bp, Allerød) in the left part of the chart (Fig. 3a). Both clusters are characterized by an abundant presence of Pinus, Betula, Alnus and Salix (Figs 2 & 3c) and also include Picea abies and small amounts of Ulmus, Quercus, Tilia and Fraxinus. Samples T3, A6, PT5, S5, L6, IC3 and TZ4 (11,500–10,500 cal. yr bp, early Holocene) cluster to the right side of the chart (Fig. 3a) and are characterized by a significant presence of Pinus, Betula, Alnus and Picea abies, but also include pollen of deciduous tree taxa (Figs 2 & 3c). Samples from pollen zones S1 and A1 (> 14,700 cal. yr bp, Oldest Dryas); pollen zones A3, L2, PT2 and TZ1 (14,400–13,800 cal. yr bp, Older Dryas); and pollen zones T2, A5, PT4, S4, L5, IC2 and TZ3 (12,900–11,500 cal. yr bp, Younger Dryas) group together in the lower left part of the diagram (Fig. 3b). These samples are composed of pollen of steppe and tundra elements (Artemisia, Chenopodiaceae, Poaceae, Juniperus and Ephedra) with up to 50% arboreal pollen such as Pinus, Betula, Alnus and Salix (Figs 2 & 3c). The scatter plot of the PCA shows that the early Holocene samples from low and mid-elevations cluster together, whereas samples from the two high-elevation sites (Iezerul Călimani and Tăul Zănoguţii) form a distinctive assemblage in the upper part of the chart (Fig. 3a). All late-glacial samples, however, group fairly close together, regardless of their elevation. Macrofossil records at the two sites with available data (Steregoiu and Preluca Ţiganului) show the occurrence of Pinus spp., Pinus mugo, Pinus sylvestris, Betula spp. and Salix spp. at the beginning of deglaciation from c. 14,500 cal. yr bp; Pinus cembra, Betula sect. Albae (B. pubescens, B. pendula) from c. 14,400 cal. yr bp; Picea abies, Larix decidua and Prunus padus from c. 14,100–13,900 cal. yr bp; and Populus tremula and Alnus at c. 13,000 yr bp. In contrast, macro-remains of the trees mentioned above were reduced (Pinus, Betula) or disappeared (Picea abies) between 12,900 and 11,700 yr bp (Appendix S3). Results from the pollen data and the selected macrofossil records indicate that the woody vegetation built up during warm intervals (Bølling and Allerød) and was reduced during the subsequent cold intervals: Older Dryas and especially the Younger Dryas (Figs 2 & 3; Appendix S3). However, with each successive warm interval, new woody taxa with warmer climate requirements were added: Pinus spp., P. mugo, P. sylvestris and P. cembra (pollen and macrofossils), Betula spp. (pollen and macrofossils), Betula sect. Albae (macrofossils), and Salix spp. (pollen) during the Bølling; Picea abies (pollen and macrofossils) and Ulmus (pollen), Populus tremula (macrofossils) during the Allerød; and Ulmus, Quercus, Tilia, Fraxinus, Acer and Corylus avellana (pollen) in the early Holocene (Figs 2 & 3; Appendix S3). Palynological richness Many sites show the greatest palynological richness (Fig. 4) at the initiation of the Holocene (after 11,500 cal. yr bp). An interval of greater richness, but with less temporal co-variance between sites, is also recorded between c. 13,800 and 12,500 cal. yr bp. Intervals of low richness were observed largely between c. 12,900 and 11,500 cal. yr bp, between c. 14,200 and 13,800 cal. yr bp, or before c. 14,000 cal. yr bp (Fig. 4). The samples from the early late-glacial (14,700–13,800 cal. yr bp) may have been affected by the abundant occurrence of Pinus (Fig. 2), a taxon with high pollen productivity, which may consequently have reduced the detection of other taxa with lower pollen productivity. Higher-elevation sites record slightly greater richness values than the remaining sites. Palynological compositional changes Trends in compositional changes are displayed in two modes: variation in time at each sequence (Fig. 5) and spatial variation along an elevational gradient (Fig. 6). The DCCA axis 1 scores for all samples (15,500–10,500 cal. yr bp) reveal that the greatest shift in compositional change is recorded around c. 11,500 cal. yr bp for all sites (Fig. 5; Table 1). Distinct compositional changes also occur around c. 14,900–14,700 cal. yr bp, c. 14,000 cal. yr bp, and c. 12,900–12,500 cal. yr bp (Fig. 5), although less evidently at Iezerul Călimani (1650 m). When DCCA analyses were repeated for the interval 13,100–10,500 cal. yr bp, a period covered by all seven sequences, trends in the compositional change were comparable with those for all samples (figure not shown). Sites from mid-elevations (730–1100 m) show, on average, greater turnover than those at low (< 440 m; Turbuţa and Avrig) and high elevations (> 1650 m; Iezerul Călimani and Tăul Zănoguţii) on DCCA axis 1 for the time interval 15,500–10,500 cal. yr bp (Fig. 6). The range values for beta-diversity are between 1.39 and 1.57 SD (mean 1.49 SD) for lowlands, between 1.66 and 1.82 SD (mean 1.73 SD) for mid-elevation, and between 1.33 and 1.46 SD (mean 1.38 SD) for high-elevation sites (Fig. 6; Table 1). Discussion Evidence for distinct ecosystem responses to recurrent cold/warm episodes of the late-glacial and early Holocene This synthesis shows that the compositional dissimilarity of the vegetation between the low-to-mid- and high-elevation sites became established at the transition from the late-glacial to Holocene (c. 11,500 cal. yr bp), suggesting that the formation of vegetation belts was initiated only at the beginning of the Holocene (Figs 2 & 3). There is also compositional distinctiveness between samples spanning different warm climatic episodes in our sequences, with the Bølling (14,700–14,200 cal. yr bp) and Allerød (13,800–12,900 cal. yr bp) showing the highest compositional similarity (Fig. 3a). The Bølling and Allerød share a common species pool with pollen of tree species dominated by Pinus and Betula (also evident from macrofossils at the two sites with available records), but differ by a lower proportion of Picea abies and of deciduous tree species (Ulmus, Quercus, Populus) during the Bølling (Figs 2 & 3; Appendix S3). During the Allerød, the vegetation composition resembles that of the early Holocene, due to the dominance of Picea abies forests with large amounts of Pinus and Betula, but lacks the conspicuous occurrence of pollen of deciduous tree taxa common during the early Holocene. Independent climate information extracted from oxygen (δ18O) and carbon isotopes (δ13C) from speleothems from north-western Romania (Figs 4 & 5) reveals a shift towards warmer and wetter conditions and higher soil productivity during the Allerød and Bølling (Tămaşet al., 2005). Warming at the initiation of the Holocene was rapid and strong in amplitude world-wide, with an estimated increase in temperature of 10 °C in c. 60 years at mid-latitude (Johnsen et al., 1992; Steffensen et al., 2008). At a regional scale, stable isotope records (Figs 5 & 6) show a rise in temperature and more pronounced rises for precipitation and soil productivity around 11,700 cal. yr bp (Tămaşet al., 2005; Constantin et al., 2007). We also identified three periods with a vegetation composition typical for colder stages: Oldest Dryas (> 14,700 cal. yr bp), Older Dryas (14,200–13,800 cal. yr bp) and Younger Dryas (12,900–11,500 cal. yr bp) (Fig. 3b). These ‘cold pollen assemblages’ were dominated by pollen of dry steppe and tundra elements, also containing Pinus, Betula, Alnus and some Picea abies (Figs 2 & 3). Local survival of these species during the Older Dryas and Younger Dryas is demonstrated by the occurrence of their macro-remains at selected sites (Appendix S3). During the Younger Dryas, the temperatures dropped close to those recorded at the height of the last glaciation, between 10 and 20 °C lower for winter temperatures, whereas precipitation was approximately half of present-day values (Isarin et al., 1998; Kutzbach et al., 1998; Jackson & Overpeck, 2000). On the other hand, the summer temperature (growing season) decreased only slightly, leading to an intensification of seasonality and continentality. Climate reconstructions based on stable isotopes (Tămaşet al., 2005) indicate a dramatic decline in precipitation at the initiation of the Younger Dryas (c. 12,500 cal. yr bp), but the changes in temperature were comparatively less marked (Figs 5 & 6). The nature of recovery processes following major disruptions of community structure Samples from each warm and each cold interval of the late-glacial show similarities in community composition; nevertheless, each interval possesses a distinct species assemblage. Each abrupt climatic cooling event caused a rapid modification in ecosystem composition, generally manifesting in a reduction of the relative abundance or local extirpation of many tree taxa alongside the development of plant communities with no modern analogue, that is, a mixed steppe and tundra (Fig. 2 & Appendix S3). However, the forests were capable of recovering during each subsequent warm period (Bølling, Allerød, early Holocene). The initial stage in the forest formation of each warm interval resembled the composition of the initial stage of the previous warm interval. During the Bølling, for example, where there was no immediate preceding warm interval and consequently no preceding cumulative events, the woody assemblage was dominated by Pinus (Pinus spp., P. sylvestris, P. mugo) and Betula spp. With the progress and/or increasing length of the warm interval (Fig. 2; Appendix S3), more temperate tree species colonized: P. cembra, Betula sect. Albae (B. pubescens, B. pendula) at the end of the Bølling; Picea abies, Salix, Sambucus, Alnus, Populus tremula, Prunus padus; and then Ulmus, Quercus, Tilia, Fraxinus excelsior, Acer, Corylus avellana in the case of the Allerød and the early Holocene, respectively (Fărcaşet al., 1999; Wohlfarth et al., 2001; Björkman et al., 2002, 2003; Tanţău et al., 2003, 2006; Ampel, 2004; Feurdean & Bennike, 2004; Feurdean, 2005; Tanţău, 2006; Feurdean et al., 2007a,b, 2010; Magyari et al., 2011). Full replacement of the formerly dominant coniferous forest by the temperate deciduous forest at low and mid-elevations took place in the first c. 1200 years of the post-glacial (Fig. 2), thus the period of conditions favourable for reproduction and recruitment needed by the temperate taxa was longer than the length of any mild interval of the late-glacial (c. 500 years for Bølling; c. 1000 years for Allerød). Our results suggest that population abundance/expansion at a given time was not only a consequence of the environmental condition of that period, but also a result of previous cumulative recruitment (Allerød and early Holocene) and extirpation events (end of the last glacial, Older Dryas and Younger Dryas). Bølling, the first warm interval of the deglaciation, is the interval with least diverse woody vegetation, while the Holocene, the last warm interval, is the richest (Fig. 2). This also resulted in a low between-sites vegetation similarity during the early Holocene, 11,500–11,000 cal. yr bp (Feurdean et al., 2010). The community organization shown by our records during repeated warm/cold periods is consistent with the regeneration niche model, in which population establishment and growth is possible only when the duration of favourable environmental conditions exceeds the mean generation time of the species involved (Jackson et al., 2009). This allows recruitment and establishment (depending on summer temperature and the length of the growing season), survival of the new recruits (depending on minimum winter temperature), and successive recruitment episodes to accumulate (Miller et al., 2008). Indeed, taxa that expanded in representation quickly at the beginning of each warm period (Pinus, Betula, Larix decidua, Alnus, Salix and Juniperus) are those that have traits which enable rapid response to climate change, including fast life-history strategies (rapid establishment probability, smaller sum of minimum growing degree-days, high relative growth rate, lower minimum seed-bearing age) and high stress-tolerance rates (to drought, temperature fluctuations). Tree taxa that need longer to expand (Picea abies, Ulmus, Quercus, Tilia, Fraxinus excelsior, Acer and Corylus avellana) have slower life-history traits (a longer life span, slower recruitment and reproductive maturity, larger sum of minimum growing degree-days), and lower stress tolerance (Bhagwat & Willis, 2008; Jackson et al., 2009; Jump et al., 2009; Lacourse, 2009). A key caveat, however, is that the production rates of pollen (which partially influence the pollen signal on which our vegetation inference is made) might have been affected by climate. Studies on the relationship between climate conditions and pollen productivity have shown that the pollen production for many tree species is related to the summer temperature of the year previous to plant flowering, but also to weather events (Autio & Hicks, 2004; Hicks, 2006; Broström et al., 2008). Trees may even stop flowering for a couple of years under cold conditions (Hicks, 2006), and this can give a false signal of a reduction in plant abundance. It is also suggested that changes in the atmospheric CO2 concentration might have affected pollen productivity: suppression during cold periods with low CO2 concentration (Jackson & Williams, 2004) and enhancement during warm periods with increased CO2 concentration (Feurdean et al., 2007a). However, one fossil sample generally covers multiple decades and therefore helps distinguish between plant die-back and cessation of pollen production. In addition, plant macrofossils at selected sites provide supplementary information on the local population survival (Appendix S3) and generally confirm the pollen-based interpretation of tree dynamics during the late-glacial. How much variation in diversity is apparent in sequences from different elevations, in response to recurrent climate fluctuations? Although there are limitations in using pollen to estimate past plant diversity resulting from varying taxonomic resolution (family, genus, species), differential pollen productivities, dispersal mechanisms of the taxa involved, and evenness (Odgaard, 2006; Weng et al., 2006; Peros & Gajewski, 2008; van der Knaap, 2009), the palynological richness provides a first-order approximation of the diversity within vegetation units: the higher the species number, the higher the palynological richness (Birks & Line, 1992; Flenley, 2005; Weng et al., 2007; Willis et al., 2007; Berglund et al., 2008). Our results indicate that, except for the early late-glacial period, variations in palynological richness and climate conditions appear to be in good temporal correlation (Fig. 4). Higher richness (probably caused by immigration exceeding extirpation) is recorded mainly during intervals characterized by warmer and wetter conditions, such as the early Holocene and Allerød. Conversely, a slightly lower richness is recorded during cold and dry periods, mainly the Younger Dryas (Fig. 4). Our results show no distinct trends in vegetation diversity/units along elevational gradients during the late-glacial and early Holocene, and do not suggest greater susceptibility to past climate change of biodiversity at high elevations. Mountains are often considered to be highly sensitive to large-amplitude climate variability, due to limited range size, geographical isolation and special adaptation of montane species (Thuiller et al., 2005; La Sorte & Jetz, 2010). In contrast, some studies have invoked a high local persistence of plant species in the mountains due to topographic variability and the local adaptation of species to their environment (Randin et al., 2009; Scherrer & Körner, 2011). How much variation in turnover is apparent in sequences during the periods of recurrent climate variability? A complete turnover of species has a gradient length of 4 SD, and at sites with high turnover there are no or few species in common at each end of the temporal sequence (Hill & Gauch, 1980; Birks & Birks, 2008). Results from DCCA reveal that major shifts in compositional changes occurred at the onset of high-magnitude climate changes (c. 12,700 and c. 11,500 cal. yr bp), regardless of whether they were cold or warm, and suggest that these recurrent and rapid reorganizations in the community assemblages were climate-driven (Fig. 5). However, the warm Younger Dryas/Holocene transition features the strongest compositional change with an average of c. 1.2 SD (which translates into c. 70% of the total changes in our sequences), illustrating the strong compositional dissimilarity of the vegetation during the early Holocene versus that of the cold Younger Dryas (Fig. 5). With the exception of the sub-alpine site (Iezerul Călimani), significant compositional changes (between 0.4 and 0.8 SD; c. 25–50%) are also evident at the onset of other climate shifts, such as at c. 14,700 cal. yr bp (mild), c. 14,200 cal. yr bp (cold), and c. 13,800 cal. yr bp (mild) (Fig. 5). In a similar study from Norway, Birks & Birks (2008) reported a change in turnover of c. 1.91 SD at the transition to the Holocene, and noticed that the pollen-based turnover estimates tend to be lower than estimates of turnover based on vegetation present on recently deglaciated glacier forelands following the Little Ice Age, probably due to an incomplete representation of plant species in the fossil pollen records. The pollen-based turnover inferences may also be affected by the differences in pollen productivity of the taxa involved. Taxa with high pollen productivity and/or effective pollen dispersal, such as Pinus, Betula and Alnus, are likely to have contributed more strongly to the compositional changes, while others, with lower pollen productivity and/or capacity of dispersal, such as Picea abies, Larix decidua, Juniperus, Ulmus, Fraxinus, Acer and Tilia, are likely to have contributed less. This is particularly the case in our subalpine site, which shows an abundant occurrence of pollen of Pinus through the whole period, and consequently a low turnover (Figs 2 & 6). Nevertheless, a major feature of our results is that sites at mid-elevations demonstrated the highest turnover (Fig. 6) and therefore appeared more sensitive to past climate change and encountered more extirpations and immigrations (Fig. 2). Mid-elevations were probably situated at the deciduous/coniferous timberline ecotone, and probably also at the limit between more forested versus more open landscapes during the late-glacial (Fig. 2; Appendix S3). Sites in the low-elevation (< 440 m) and lower alpine (1840 m) zones had the next highest turnover, while the sub-alpine site (1650 m) appeared the least sensitive (Fig. 6). Inhospitable climate conditions throughout most of the late-glacial in the subalpine and lower alpine areas could imply less species displacement and consequently a lower turnover (Figs 2 & 6). On the other hand, modern observations in the Alps indicate that the high local topographic variability of upper mountains allows plants to find suitable habitats for survival within small distances (Randin et al., 2009; Scherrer & Körner, 2011). Conclusions Numerous studies have set out to identify at which locations biodiversity is most vulnerable to projected future climate change. Our synthesis of pollen records provides evidence for recurrent rapid ecosystem organization and biotic responses (community composition, diversity and turnover) to late-glacial and early Holocene climate variability. The biotic response appears to be greater at times with higher-amplitude climatic shifts (c. 11,500 cal. yr bp), providing evidence for a strongly positive relationship between the intensity of climate change and the vegetation response. There is a good consistency in vegetation composition and dynamics during repeated warm and cold episodes, but differences also exist. The community composition at a given time was not only the product of existing environmental conditions, but also the consequence of previous cumulative episodes of extirpation and recolonization. Many local circumpolar woody plants were able to survive when environmental conditions became unfavourable (colder/drier events of the late-glacial), and these populations acted as sources when the climate became more favourable again (warmer/wetter). This is in agreement with modelling results at the local scale, predicting the persistence of suitable habitats and species survival within large-grid cells in which they were predicted to disappear by the coarse-scale models.

In terms of elevation, change in past compositional turnover appears to be strongest between 730 and 1100 m, followed by the low-elevation sites. This finding is in partial contrast with coarse-scale models, which estimate a slightly higher future species turnover in lowlands than at mid-elevations. The magnitude of change in palynological richness does not support greater sensitivity of this measure of biodiversity at high elevations to climate change

## 2NC – CO2 Not Key

No impact to CO2 level rise

Happer ’11 [May 23rd, 2011, William, Chairman of the Board of Directors (GMI); Cyrus Fogg Brackett Professor of Physics, Princeton University, Ph.D. in Physics from Princeton, “The Truth About Greenhouse Gases”, <http://www.marshall.org/article.php?id=953>]

Although human beings and many other animals would do well with no CO2 at all

AND

of CO2 from the warming oceans and the reverse effect when they cooled.

## 2NC AT Tech Solves

Tech doesn’t solve – it’s too far off – we have just enough time to create a shift in agriculture – delaying makes global famines inevitable

Idso, et. al, ‘11 [Sherwood PhD and fmr research physicist for the Dept of Ag, Keith PhD Botany, Craig PhD Geography, “Feeding the Future World, Volume 13, Number 39: 29 September 2010, <http://www.co2science.org/articles/V13/N39/EDIT.php>

"Improving photosynthetic conversion efficiency will require," as the three scientists describe it,

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and human starvation on a massive scale a mere few decades from now.

# Mexico Ptix

## Uniqueness

Nieto’s PC is gaining public support—will pass

PR Newswire 9-20 September 20, 2013. “Poll: Majority Support Pena Nieto Energy Reforms, but Fears over Privatization Suggest Hurdles Remain.” http://news.yahoo.com/poll-majority-support-pena-nieto-energy-reforms-fears-160000577.html

The first national survey to take an in-depth look at Mexican President Enrique

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reform supporters can overcome opposition charges of privatization and win the public debate."

Education protest and reform does not thump

Webber 9-18 Jude Webber. “Mexico energy reform: more popular than you think.” http://blogs.ft.com/beyond-brics/2013/09/18/mexico-energy-reform-more-popular-than-you-think/#axzz2fXKdQwAR]

Has opposition to Mexico’s reform agenda gone away, swept from the capital’s main square

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in reference to Lázaro Cárdenas, the president who nationalised Pemex in 1938.

Analysts conclude *momentum* ensures passage

Newbery 9-3 [Charles Newbery et al. “LatamWatch: Mexico President Rallies Support for Key Reforms.” SEPTEMBER 3, 2013. https://mninews.marketnews.com/index.php/latamwatch-mexico-president-rallies-support-key-reforms?q=content/latamwatch-mexico-president-rallies-support-key-reforms]

BUENOS AIRES, MEXICO CITY AND SAO PAULO, SEPT 3 (MNI) -

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who said it was to retain state ownership of oil and gas rights.

## Plan key

Nieto’s presidency will cut back in engagement with the US—Mexicans have grown skeptical of cooperation

Nelsen ’13 [APRIL 25, 2013. Aaron Nelsen is a Rio Grande Valley Correspondent at San Antonio Express-News , a previous Correspondent at TIME.com and Markets Reporter at Reuters. “U.S. and Mexico circle warily.” http://www.mysanantonio.com/opinion/commentary/article/U-S-and-Mexico-circle-warily-4464166.php]

When President Barack Obama and Mexico President Enrique Peña Nieto meet on Thursday, issues

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security analyst for Stratfor, an Austin-based private global intelligence firm.

Improving border infrastructure would be politically unpopular for the Mexican government—poor understanding and security concerns

Corchado ’13 [August 7, 2013. ALFREDO CORCHADO is a journalist for the Mexico Bureau. “Premium Article U.S., Mexican officials discuss future of border at conference.” http://www.dallasnews.com/news/state/headlines/20130807-u.s.-mexican-officials-discuss-future-of-border-at-conference.ece]

EL PASO — Battered, bruised and misunderstood, the U.S.-Mexico

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costly for taxpayers. … Both sides need to coordinate and prioritize better.”

Past Mexican election proves expanding the NADBank goes against business interests and is politically contentious

Stratfor ‘6 [June 30, 2006. Stratfor Staff--global intelligence company founded in Austin, Texas, by George Friedman who is the chief intelligence officer, and CEO of the company. “Mexico's Economic Choices in the Upcoming Election.” http://www.offnews.info/verArticulo.php?contenidoID=5007]

Lopez Obrador, meanwhile, has not proposed any tax reforms; he plans to

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Mexico can push ahead and engage in reforms that can attract more investment.

Border infrastructure investment will get tied into discussions of the drug war—backfires on Nieto

Paley ’13 [2013. Dawn Paley is an independent researcher for CIP Americas, long time contributing editor with The Dominion, and a co-founder of the Vancouver Media Co-op. “A Rough Guide to Obama’s Mexico Visit.” http://www.cipamericas.org/archives/9449#sthash.NhdSllJv.dpuf]

Border infrastructure, Migration & Citizen Security¶ Obama will likely promote the immigration reform

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last thing Peña Nieto wants to do while sharing the spotlight with Obama.

## AT Engagement

Meetings don’t thump. Nieto has been lucky to get reforms passed but party and public opposition is growing

Agren ’13 [May 2, 2013. David Agren, Special for USA TODAY. “U.S., Mexico to talk trade barriers during Obama visit.” http://www.usatoday.com/story/news/world/2013/05/02/mexico-obama-economy/2126239/]

Peña Nieto has promised structural reforms – which he says will add 2 percentage points

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with no pension or health benefits, according to the country's statistics institute.

## AT No Solve

Energy reform is critical to rejuvenate PEMEX—that’s key to Mexico’s economy

Althaus ’13 [August 13, 2013. Dudley Althaus is GlobalPost's senior correspondent for Mexico and Central America. “The great Mexican gamble: Can Big Oil save the country's economy?” http://www.globalpost.com/dispatch/news/regions/americas/mexico/130813/mexico-energy-reform-pemex-oil-gas-electricity]

MEXICO CITY, Mexico — President Enrique Peña Nieto on Monday called for constitutional changes

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together can muster the congressional votes to pass some sort of energy reform.

It’s reverse causal—failure to pass reform causes PEMEX and financial collapse

Meacham 8-15 [AUG 15, 2013. Carl Meacham is the director of the Americas Program at the Center for Strategic and International Studies (CSIS) in Washington, D.C. Tania Miranda, intern scholar with the CSIS Americas Program, provided research assistance. “Mexican Energy Reform: Politics and Predictions.” http://csis.org/publication/mexican-energy-reform-politics-and-predictions]

Q1: What will happen if a reform bill is not approved? A1:

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suffer and the potential effects could include a full-blown budget crisis.

Energy reform solves Mexican manufacturing—

Russell ’13 [August 30, 2013. K. Alan Russell, President and C.E.O. of the Tecma Group of Companies. “Energy reform is a potential boon to manufacturers in Mexico.” https://exploreb2b.com/articles/energy-reform-is-a-potential-boon-to-manufacturers-in-mexico]

In Mexico, schoolchildren are taught to take pride in the state’s ownership of the

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and a new era of energy independence and stability will follow close behind.

## AT Elections

The PRD may be rhetorically strong but lacks a strategy to oppose reform

Gallegos 8-15 [Aug 15, 2013. Raul Gallegos is a journalist for Bloomberg. “75 Years Later, Is Mexico Ready for Energy Reform?” http://www.bloomberg.com/news/2013-08-15/75-years-later-is-mexico-ready-for-energy-reform-.html]

Despite such indignation, the radical left’s ignorance of oil affairs became clear on Monday

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but government is for all. Mexico must emerge from this process strengthened.”

Nieto can get the necessary votes without the Pact for Mexico

Economist ’13 [Jul 13th 2013. The Economist. “Choose Pemex over the pact.” http://www.economist.com/news/leaders/21581730-successful-cross-party-pact-has-broken-congressional-gridlock-it-must-not-become-obstacle]

PLENTY of Americans must have cast a jealous eye south of the border this year

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reforms. It must not be allowed to become an obstacle to them.

## AT Win

Empirics prove that economic engagement with the US produces a nationalistic backlash that destroys political credibility

Starr ‘12 [October 2012. Pamela K. Starr is the Director of the U.S.-Mexico Network and an Associate Professor at the Center on Public Diplomacy at the University of Southern California. “The United States and Mexican Domestic Politics,” college.usc.edu/usmexnet/wp-content/.../Camp-Oxford-paper-final.doc]

Despite the permanent reduction in bilateral tensions that took root in 1928, the power

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being too willing to accept support and guidance from north of the border.