

What's Next for Lebanon? Examining the Implications of Current Protests

Hanin Ghaddar

Friedmann Visiting Fellow, The Washington Institute for Near East Policy

Testimony submitted to the House Committee on Foreign Affairs, Subcommittee on the Middle East, North Africa, and International Terrorism

November 19, 2019

Chairman Deutch, ranking Member Wilson, distinguished committee members, thank you very much for inviting me to testify at today's hearing. It is an honor to speak to you today about U.S. policy toward Lebanon, one month after protestors took to the streets and three weeks after the government resigned.

EXECUTIVE SUMMARY

For a month, nationwide protests have swept Lebanon due to deteriorating economic conditions and the persistent corruption of the ruling class. Two weeks into the protests, Prime Minister Saad Hariri resigned. When asked to form a new government, Hariri faced a deadlock, as he wanted to form a government made up of independent technocrats. It's what the protestors are demanding but it is also a requirement for outside financial assistance to Lebanon. A government of political figures—or even a mixed government of politicians and technocrats—is not one that would generate confidence at home or internationally.

It is still unclear who will form the new government. Hezbollah's camp within the parliament has nominated former minister Mohammad Safadi—who declined—and are now considering similar non-controversial names. Hariri might be asked again, but in any case, none of these names are suitable to form an independent technocratic government that would satisfy the protests' demands, because the current authorities—president and parliament—are still influenced by Hezbollah.

President Michel Aoun is a Hezbollah ally. In the 2018 parliamentary elections, Hezbollah and its allies won more than 70 of the 128 seats. Therefore, the current parliament—headed by another Hezbollah ally, Speaker Nabih Berri—will not accept a new government that would contain Hezbollah's power in Lebanon and within its state institutions. But a clearly pro-Hezbollah government rejected by most Lebanese will not prevent an economic disaster or isolation from the West and the Arab world. Lebanon could find itself on its own, as the Venezuela of the Middle East.

Hezbollah is worried that a new independent government would be the first step in isolating the party and eventually disarming it. However, if Hezbollah itself continues to intimidate the protes-

tors and possibly moves into areas of non-Shia religious sects to do so, this would lead the protests to ultimately become anti-Iran, as the case is in Iraq. To avoid this outcome, Hezbollah is using its influence within state institutions—mainly the Lebanese Army intelligence—to quell the protests.

But Hezbollah also is going through its own financial crisis—thanks to U.S. sanctions on Iran and it will not be able to fund Lebanon when the economy collapses. Meanwhile, as it sides with corruption and the political class, Hezbollah is facing its first serious domestic challenge, as its own Shia constituency joined the protests.

The protests will continue and doubtless escalate, with more uncertainty regarding the economy, and the possibility of violence on the rise. But there are a number of opportunities for the international community to help the Lebanese people and contain Hezbollah.

In this testimony, I will examine the nature of these protests, assess the short-term and long-term outcomes of the fast economic deterioration on state institutions, and offer some recommendations on how Washington can best support the Lebanese people and contain Iran in Lebanon preferably away from the public domain. The United States has some leverage in Lebanon that can be used to push for reforms and contain Hezbollah. The most obvious leverage is U.S. aid to the Lebanese Armed Forces.

WHY NOW?

The core of these protests is economic. The financial stress predates the October 17 revolt, resulting in the Central Bank (BDL) starting to ration dollars in September. It increased when it became clear that an approach to reduce the financial imbalances by increasing indirect taxation and reducing public services had become unacceptable to the population, given the deterioration of the social situation. The share of population in poverty is approaching the 30% mark (World Bank estimation), unemployment is high, and emigration of skilled youths is at record levels.

In 2018, the state's expenditures stood at \$16 billion and its revenues at \$12.5 billion, resulting in a fiscal deficit of over 20 percent. Moreover, debt servicing consumes 35 percent of expenditure. Lebanon's Central Bank is fast running out of foreign reserves, and the Lebanese lira has been on a painful journey of devaluation. Lebanon was hoping to secure \$11 billion in pledges, known as the CEDRE aid. But without real reforms, Lebanon cannot receive this aid.

In April 2018, Paris hosted the CEDRE Conference to help Lebanon raise funds to finance modernizing the country's infrastructure. But the conference's funding packages are conditional upon the implementation of budgetary and sectoral reforms that Beirut committed to last year. Two followup mechanisms are planned for the CEDRE process: a coordination group in Beirut, which is of a highly operational nature, and another that will bring together multilateral donors (the World Bank, the European Union, the United Nations) and the countries that have contributed the most (Germany, France, Saudi Arabia, Kuwait), which will have a more strategic and monitoring focus.

So far, Lebanon has not made the required reforms to receive the aid. The reforms required by the donors include filling current vacancies in the sectoral regulatory authorities in telecommunications, energy, and civil aviation. But most important, the Lebanese government had to show signs of commitment through the electricity reform plan.

Lebanon suffers daily power outages while the state power company is awash in subsidies. The

electricity sector costs the government around 2 billion U.S. dollars in deficit yearly; therefore, reforming this sector would cover a huge part of the fiscal consolidation promised to donors last year. However, a feasible plan hasn't been presented yet, because reform will not be in the interest of those benefiting from the problem, such as Foreign Minister Gebran Bassil.¹ The current political class has no interest in finding a solution to the electricity crisis, as they benefit from the alternative power providers, that is, the private electricity generators. Despite many offers from the international community to help in this regard, Lebanese politicians have so far refused any viable solution in order to maintain this gold mine. That is exactly why only a government of independent technocrats can start these fundamental reforms.

The Lebanese economy is in a state of stagflation, with a real GDP growth rate that is plummeting toward zero percent. Inflation also continues to rise and is expected to reach 10 percent this year. Probable causes for this rise are the government's protectionist measures on imported goods and the lack of foreign currency in circulation, which has led to a secondary market for the Lebanese lira and effectively devalued it. The ever-increasing fiscal deficit is a problem as well—it has grown by 100 percent since 2014 and is likely to exceed 11 percent of GDP.

The bleak economic situation is also evident in the fact that Lebanon's readily available foreign reserves are now valued at less than \$10 billion. The government will need these reserves to repay dollar-denominated bonds, cover for the withdrawal of Lebanese funds from banks, and manage basic currency needs. Barring any dramatic improvements, however, current reserves will only last another three to four months, and a recession remains likely.

In light of such challenges, a new government is needed as soon as possible—one that can gain the people's trust quickly. Reforms must then be put in place with the implementation of a financial stability package that can facilitate the recovery of foreign reserves. Diaspora support to the Lebanese economy has been vital in keeping it afloat, but such assistance may prove meaningless under the current leadership's mismanagement.

With this political class holding on to power, the economic crisis will only deepen, and we will see a fast devaluation of the Lebanese pound (LBP) on the informal market. In the absence of corrective measures, the LBP will continue to devaluate in the upcoming period, with the possibility of spiraling out of control if reserves keep on being depleted.

In place of the current leadership, a transitional government composed of bureaucrats known for their impartiality should be enlisted to run the country. This body would be separated into three parts: economic, constitutional, and judicial. An economic committee would focus on bringing the Lebanese economy back from the abyss; a constitutional committee would draw up a new electoral law that is both nonsectarian and representative; and a judicial committee would create statutes to investigate current cases of corruption that brought Lebanon to its current economic crisis, as well as to prevent corruption and tax evasion.

On the economy more specifically, the newly instituted committee would set about implementing real reforms, as opposed to the cosmetic changes proposed by Hariri on October 20, the fourth day of the protests. These would include solving the crisis over electricity, which now consumes about a third of the state budget. They would also include controlling the borders and Hezbollah's smuggling of fuel and money to the Syrian regime, in addition to drug and weapons smuggling in and out of Lebanon. Finally, economic reforms must shrink the bloated public sector, from which

¹ "Plagued by Cuts, Lebanon Survives on Floating Power Plants," Associated Press, July 22, 2018, <u>https://ap-news.com/20e21b2c469c4653ae32167f15ac631c/SOMNIA</u>

political leaders liberally award patronage jobs to their unquestioning supporters.

The electoral law proposed above would produce a new parliament, which in turn would result in a new president and cabinet. A serious effort to contain corruption in Lebanon would require applying the rule of law on old and new political figures, in order to prevent another crack in the fragile economy.

The root cause of Lebanon's economic hardships lies, however, in its loss of sovereignty. In fact, the leader of Hezbollah publicly acknowledges that its ideological, political, and military existence is subservient to the Supreme Leader of Iran. No country can remain stable or prosper if its major political and military decisions are controlled by a foreign or illegal power. When implementing Iran's agenda becomes more important for this political class than addressing the domestic economy and people's needs, the country cannot prosper.

Although the core of the protest is economic, the street rhetoric has developed over the weeks to address the deeper roots of the problem. It is not a coincidence that the most two corrupt political figures to be criticized by the protestors—Speaker Nabih Berri and Foreign Minister Gebran Bassil—are Hezbollah's two main allies. The protests' demands also transcended the economic ailments and are now focused on a new non-sectarian system that should start with a new non-sectarian electoral law and early elections, which would produce a new parliament, a new president, and a new government. There is a clear awareness in the streets that the economy cannot be revived with the same sectarian political system.

We also need to realize that these protests are unprecedented, and that the opportunities they provide are unique and exceptional. For the first time, the Lebanese people have realized that the enemy is within, their own government and political leaders, not an outside occupier or regional influencer. Also, political leaders have been unable to control the course of the protests, which are taking place across all sects and all regions.

In a way, these protests are driven by a generation that hasn't been dominated by civil war rhetoric, and is more concerned about the future rather than sectarian politics. It is a very significant moment because it highlights U.S. values of freedom and democracy and at the same time challenges radical thinking and propaganda. The United States does have an interest in protecting these protests and the leverage to do so. Among other things, this would help contain Iran's role in Lebanon.

If the international community does not realize the significance of this rare moment, extremist forces will win, as they thrive on chaos. Hezbollah leader Hassan Nasrallah made it clear in his most recent speech that the group doesn't mind a Yemen scenario in Lebanon. Chaos is not their enemy, but it is certainly the enemy of Lebanon's democracy and sovereignty.

HEZBOLLAH'S DOMESTIC CHALLENGE

Although chaos won't weaken Hezbollah, they still prefer the status quo, where they have a friendly government, an allied president, and a majority in parliament. A semi-functioning state—like the one they have enjoyed since May 2018—would provide Hezbollah with two significant components: first, international cover, under which the prime minister and president can communicate with the international community and offer stability in exchange for aid; second, an alternative source of income that Hezbollah urgently needs, since its own finances are depleting due to U.S. sanctions on Iran and the group's expenditures in Syria.

However, Hezbollah has come to realize that the status quo is more fragile than they thought, and that winning elections or declaring military victories is not enough. Likewise, Iran believed it had won the long game: Hezbollah prevailed in the parliamentary elections; they both managed to save their ally in Damascus, Syrian president Bashar al-Assad; and Tehran gained a lot more power in Baghdad through the Popular Mobilization Forces (PMF). But they forgot about the day after. Without a socioeconomic vision for these countries, Iran has failed to rule them.²

State institutions in Lebanon have one main job today: instead of protecting and serving the people, they have to protect and serve Iranian interests. Sovereign entities such as the Ministries of Defense, Finance, and Foreign Affairs have pro-Hezbollah ministers, through whom the group controls the country's main security and financial decisions. They also directly manage the Ministry of Health, through which they can serve their community, mainly the hundreds of thousands of fighters injured in Syria and the region. Hezbollah also benefits from its influence within the state to control all ports of entry: the airport, seaport, and the borders with Syria, where they can smuggle goods, weapons, money, and fighters.

Not only have the protests included Hezbollah in the corrupt political class that needs to step down, the Shia community—for the first time—has joined the demonstrations. For Hezbollah, when the Shia community decides to reclaim their national identity—against their sectarian Shia identity—this is a dangerous moment. The Shia of Lebanon have always been the backbone of the group's domestic and regional power. They vote for Hezbollah and its Shia ally Amal during elections, they fight with them in Lebanon, Syria, and Yemen. In return, they receive salaries and services offered abundantly by Iran and Hezbollah's other sources of income.

In the 2005 Cedar Revolution, when the Lebanese took to the streets in similarly large numbers to topple the government and push the Syrian army out of Lebanon, the Shia community did not join. Hezbollah asked the Shia to join its counter-revolution, or what came to be known as the March 8 protests. Back then, Hezbollah's credibility within the community was strong, and it still had the trust of the Shia community.

Today, three main factors have pushed the Shia to join the rest of the Lebanese in their nationwide protests. First, Hezbollah's costly involvement in the Syrian war, in addition to the its financial crisis resulting from U.S. sanctions hitting Iran, forced the Party of God to cut salaries and services, widening the gap between the rich and the poor within its own community. For example, the Shia drafted to fight in Syria were mostly from poor neighborhoods, while Hezbollah's officials—who live in a different part of the group's Beirut stronghold Dahiya—were benefiting from the war riches. But Dahiya is a very small place, and when the poor Shia suffering the Syrian war repercussions saw Hezbollah officials and their family members driving luxury cars and living in beautiful apartments, resentment was a logical outcome.

Second, Hezbollah's constituency was forced to accept Hezbollah ally Nabih Berri as a necessary evil to keep the Shia house intact. Although Berri's corruption was not in line with Hezbollah's narrative of transparency and integrity, the community turned a blind eye to his abuses for decades. But when Lebanon's economy started to deteriorate around the same time as Hezbollah's finances were being hit, these people could no longer pay their bills, find jobs, or benefit from the

² Hanin Ghaddar, "Iran Is Losing the Middle East, Protests in Lebanon and Iraq Show," Foreign Policy, October 22, 2019 <u>https://foreignpolicy.com/2019/10/22/iran-losing-middle-east-iraq-lebanon-protests-bad-governance/</u>

group's services. Accordingly, Berri's corruption and outrageous wealth will no longer be tolerated.

Third, Hezbollah promoted itself as victorious after Israel's withdrawal from Lebanon in 2000, and then claimed divine victory after the July war with Israel in 2006. The group then claimed victories in Syria against its new enemy, Sunni extremism. However, none of these victories translated into well-being for the Shia or the Lebanese public in general. Military victories were used to advance Iran's agenda in the region, but the Shia in Lebanon became more isolated than ever. Countries in the Gulf and Africa no longer welcome Shia businessmen and employees as they used to. Lebanese banks are more suspicious of the Shia, especially after the United States sanctioned Beirut-based Jammal Trust Bank based on its financial ties to Hezbollah. The Shia eventually realized that they only have Hezbollah, a group that can only provide weaponry and tales of victory. As one protestor told a television reporter, "We are all pro-resistance and we will be with Hezbollah when they fight Israel, but we are hungry, and the Israelis are eating." By joining other Lebanese, the Shia community was attempting to claim their Lebanese identity, versus their Shia identity that has failed them so far, and that has become intrinsically tied to Hezbollah and Iran.

Hezbollah understood what these protests have achieved, and realized the magnitude of the loss its majority government, its ever-loyal president, and its democratically elected parliament will suffer. He made it very clear that he will not allow it.

It is no secret that Hezbollah has benefitted financially from its control of state institutions, more so since Iran cut its yearly budget by half. Hezbollah had to cut services and stop paying salaries to contractors and unnecessary employees. Instead, it started taking advantage of the presence of its ministers and allies in the government in order to offer jobs and services to its supporters. That worked until the state was no longer able to serve Hezbollah. When Lebanon's economy hit an unprecedented low, it was clear that Hezbollah's needs were greater than the Lebanese state and beyond its means.

Losing the financial benefits is one thing, but losing the say in politics and security decisions is another. That's why Nasrallah, in remarks made on October 19, made it very clear to both the political class and the demonstrators that he opposes the toppling of the government, and warned against it. The streets reacted strongly against Hezbollah. First, they started calling Nasrallah by name as part of the political class, after refraining from criticizing his group publicly. Second, more Shia took to the streets in areas considered Hezbollah strongholds, such as Nabatiyah in the south and Baalbek in the Beqa Valley.

In short, Hezbollah's long-term plan failed. Since the group moved from the opposition to the authority in April 2018 when it won the parliamentary elections, it has failed to maintain the thin line that separated its state from the Lebanese state. Instead, it burrowed deeper into state institutions and insisted on blurring this line further, causing more isolation of Lebanon by an international community that had previously supported its political and financial stability.

Going forward, Hezbollah will keep doing what it does best: rather than stepping back and allowing reforms to be implemented by a new government with qualified ministers, it has resorted to force. Nasrallah made it very clear: his government will not fall. So far, Hezbollah is trying to avoid the Iraq scenario by eschewing direct confrontation with the protestors. Instead, it seeks to create a rift between the protestors and the army by using the Military Intelligence Unit.

U.S. AID TO THE LEBANESE ARMY

The United States has so far provided the Lebanese Armed Forces (LAF) \$2 billion since 2006, in military equipment and through International Military Education and Training (IMET). Over the past thirteen years, the LAF has developed to the point that many U.S. military officers now consider it to be the best Arab army.

The issue with the LAF has never been capability but politics. Today, the LAF remains institutionally incapable of taking on politically sensitive missions, such as confronting Hezbollah and addressing the issue of its arms. Successive Lebanese governments have legitimized Hezbollah's weapons and its "resistance" mission against Israel in their ministerial statements.

In 2006, after the war between Hezbollah and Israel ended, the LAF deployed to the south for the first time in decades. Many hoped that the LAF might help implement UN Security Council Resolution 1701, which obliged Lebanon to prevent the postwar rearming of Hezbollah. Over the past thirteen years, however, the LAF has failed to do so, mainly due the unwillingness of successive Lebanese governments to implement 1701.

In 2008, the then pro-West government in Beirut mandated the removal of Hezbollah's dedicated fiber-optic network from the south up to Beirut and the removal of LAF General Wafiq Choucair, the Hezbollah-sympathetic officer who ran Beirut airport. But when the LAF declined to remove Choucair and the government persisted in its demand, Hezbollah militarily took over large swaths of the capital, killing nearly a hundred civilians. The LAF did not challenge Hezbollah's offensive, and after the government backed down, the LAF coordinated with Hezbollah and took up Hezbollah's positions following its withdrawal.³

Since the Syrian war began in 2011, the LAF has done nothing to prevent the movement of Hezbollah troops and weapons into and out of Syria, where the militia has been fighting in support of the Assad regime. The LAF also conducted aggressive campaigns against Syrian refugees, violating human rights on many occasions.

In June 2013 in particular, Hezbollah-LAF cooperation reached dangerous limits, when the two forces fought side by side against two to three hundred heavily armed supporters of the anti-As-sad Salafi cleric Sheikh Ahmed Assir in the southern city of Saida. They also coordinated during a similar campaign in Tripoli the year after.

The LAF has a great record of accounting for its U.S.-origin equipment, having transferred none of it to Hezbollah. However, it is not the equipment that Hezbollah needs; it is the political and security decision that Hezbollah wants to influence.

Today, the LAF stands at a very critical juncture. The United States has made clear that it is the LAF's job to protect the Lebanese protestors against intimidation. This worked during the first couple weeks, when the LAF managed to protect the protestors against violent attacks carried out by Hezbollah-affiliated thugs who stormed the squares where the protests gather.

However, three main issues have shifted since then, and it shows both the division within the LAF and its mixed loyalties. First, the LAF withdrew from portions of the south and Beqa known to be Shia areas. When Hezbollah started intimidating Shia protestors in Nabatiyah, Tyre, and Baalbek

³ David Schenker, "U.S. Security Assistance to Lebanon at Risk," The Washington Institute for Near East Policy, August 3, 2017, <u>https://www.washingtoninstitute.org/policy-analysis/view/u.s.-security-assistance-to-lebanon-at-risk</u>

using violence and threats, the army was not present to protect them. The LAF continued protecting protestors in non-Shia areas.

Second, after three weeks of Hezbollah trying to get the protestors to open the roads, an act that made the protests efficient, the LAF finally budged and opened the roads by force, sometimes by using their weapons. This has recently led to the killing of a protestor in front of his son and wife in the middle of Khalde highway. It was later revealed that the army officer who committed the crime is from the Military Intelligence Unit.

Three, factions within the LAF's Military Intelligence Unit—known to be the closest and most affiliated with Hezbollah and the president—started a wave of arrests of activists. Some are still detailed, while others were released with clear signs of torture on their bodies, and with disturbing testimonies.

These shifts in the army's behavior show that there are contradicting affiliations within units, and that parts of the army's Military Intelligence and the Republican Guards seem to be acting on their own to fulfill Hezbollah's agenda, away from the Army's General Command. This is a major shift that should concern the United States, mainly because of the generous U.S. aid to the LAF.

RECOMMENDATIONS

As the Lebanese Armed Forces are showing seeds of divisions, with Military Intelligence arresting, torturing, and murdering protestors, it is vital to address U.S. military aid to Lebanon. However, any such effort must keep in mind that there are many army units that oppose the arrest and torture of unarmed protestors. These elements will be much needed if violence escalates and the economic crisis deepens.

The Lebanese state is facing bankruptcy sooner than expected, and the state will no longer be able to pay salaries to public employees, including the army and security officers. Foreign aid will be needed to save the country from total collapse and chaos, but it should not be provided without conditions that ensure sovereignty and a new political class that is not corrupt. Therefore, a government of independent technocrats and early elections should be the main requirements for Lebanon to receive any financial assistance.

There is an urgent need to form a credible government that can inspire confidence—internally and externally—and reduce the catastrophic risks looming ahead. This new cabinet needs to make the crucial decisions required to implement real reforms, work on a non-sectarian electoral law, and supervise early elections. Foreign aid, including the CEDRE aid, should not be released before a new, credible government takes these necessary steps. In addition, aid needs to be sequential, based on the achievement of certain milestones in implementing reform and designing an electoral law.

Hezbollah will try its best to resist the change, and will work harder to break the LAF. Eventually, it will likely use its own weapons against the people if all else fails.

On Aid to the LAF:

• *Continue urging the LAF to protect nonviolent protestors.* The United States should reiterate that continued U.S. assistance to the LAF is contingent on safeguarding protestors. The notion of "command responsibility" should be observed in the sense that the LAF's command will be called into question if any of its sub-entities—mainly Military Intelligence—violate human rights.

- Urge the LAF to protect all Lebanese citizens, including Shia. The LAF have vacated all the Shia towns and cities in Lebanon. In turn, Hezbollah's constituency has decided to join the rest of the people and regain their national rather than Shia identity. The LAF needs to protect this aspiration and protect them when needed.
- Condition military aid to the LAF to ensure that units within the Military Intelligence and Republican Guards do not benefit from it. It is vital that U.S. aid to the army does not benefit units that are violating basic human rights. On the contrary, the LAF should be pressured to further protect protestors and safeguard basic rights such as freedom of assembly and freedom of thought and expression.
- *Redesign the aid package*. If the state goes bankrupt and is no longer able to provide salaries to public employees, including the army, the entire aid package needs to be redesigned to ensure that reliable units within the army can still function under its leadership to protect Lebanon and the people against violence committed by other units or Hezbollah.

Domestically:

The United States and Europe should not go into the nitty-gritty of cabinet formation in terms of form and composition, but they should nonetheless call for the constitutional process to be observed. In this context:

- *Exert pressure on President Michel Aoun* to call for immediate parliamentary deliberations for designation of a new PM to materialize. The pretext for such an immediate call should be linked to the formation of a new independent and qualified government, headed by a trusted prime minister, outside Hezbollah's choices.
- *Sanction Hezbollah's allies.* Aoun, Berri, and Bassil are not only Hezbollah's main allies, they are also the most corrupt political figures in Lebanon, and the main figures that the protestors are calling out. It is time to start sanctioning these individuals to send a message of support to both the Lebanese people and future cabinet members that corruption and alliance with Hezbollah will not be tolerated. It is time for these figures to be held responsible. This would also cripple Hezbollah politically. Without such allies, the group's power within state institutions will be contained.

Internationally:

- Work closely with the Europeans, mainly the French and the Germans, to ensure that any stability-related financial aid to Lebanon—including CEDRE—is not provided unless a new, independent, and transitional cabinet is formed to work on reforms and early elections. Otherwise, international aid will simply be absorbed again by the corrupt ruling class, and will eventually benefit Hezbollah.
- *Address Iran's regional operations.* From Iraq to Lebanon, it has become clear that Iran is not a factor in providing stability, so its regional power should no longer be tolerated. When Iran's own support base can no longer accept Tehran as its ruler, the international

community needs to listen and understand the deep rift between Iran's proxies and its alleged supporters. Accordingly, any future deal or agreement with Iran needs to address its regional presence and influence, and realize that Tehran's power is more fragile than the world perceives. Most important, policymakers need to realize that the Shia do not belong to Iran, and that maybe it is time to start working directly with Shia communities. The core of the crisis today is economic. Therefore, securing economic alternatives for Shia communities in Lebanon is vital. However, this can only work through a representative and independent government to make sure Iran does not benefit from any of these alternatives.